

High yield bonds have become a mainstay of many institutional investors' portfolios in recent decades, be it on either a standalone basis or part of a broader credit allocation. This paper introduces high yield bonds as an asset class. We begin by providing background information on high yield bonds. We then proceed to discuss the three major risks inherent in high yield bonds: liquidity risk, default risk, and interest rate risk. We subsequently analyze the return behavior of high yield bonds, including the characteristics of expected return, volatility, and correlation with other asset classes. We then proceed to evaluate the case for high yield bonds by comparing their use in a strategic and tactical context. The last section deals with issues an investor may face after deciding to invest in high yield bonds.

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Key takeaways

- High yield bonds offer higher yields than investment grade corporate bonds, primarily due to their increased risk of default.
- Some of the factors that drove the early growth in the high yield bond market remain, such as disintermediation and the use of high yield bonds for buyouts and capital restructurings.
- The high yield bond market is more evenly distributed across sectors compared to the US stock market, with technology and communications being the largest sector.
- High yield bonds generally offer higher returns than investment grade bonds but with higher volatility and correlation with equities.
- Active high yield bond managers have added modest alpha before fees. Active management is often valued for the perceived downside protection it offers.

High yield bonds

High yield bonds are fixed-rate bonds rated as less than investment grade by the three main credit rating agencies (Moody's, Standard & Poor's, and Fitch) and are usually issued by corporations. Because the corporations who issue this lower-rated debt are more likely to experience a default than corporations rated as investment grade, investors typically demand a premium in the form of a higher yield.

The high yield bond asset class covers a wide range of bonds, from just below investment grade issues to much riskier securities that have lost their credit ratings entirely.¹ Specifically, bonds with ratings of BBB- (Standard & Poor's and Fitch)/ Baa3 (Moody's) or better are considered investment grade, while bonds with ratings of BB+ (Standard & Poor's and Fitch) / Ba1 (Moody's) or worse are considered to be non-investment grade.

This paper uses the Bloomberg US Corporate High Yield Index as a proxy for the US high yield bond market. As of June 30, 2024, there were approximately 1,953 issues in the Bloomberg US Corporate High Yield Index, with an aggregate market value of \$1.29 trillion.² This represented approximately one-fifth of both market value and total issuance of corporate debt tracked by Bloomberg.

As Figure 1 illustrates, most bonds in the high yield market are rated either BB or B.³ CCC-rated bonds tend to comprise 10%-15% of the market. Over the past decade, the high yield bond market has experienced an improvement in average credit quality, with BB-rated bonds increasing from 37% of market value in December 2000 to 51% in June 2024. This increase has been accompanied by a reduction in the proportion of B-rated bonds.

¹ Bond rating agencies provide letter grades of credit worthiness that indicate how likely it is that debt issues will be repaid. According to Fidelity, bond ratings of BB have little near-term weakness but face major ongoing uncertainties or exposure to adverse business conditions that could lead to inadequate capacity to repay principal and interest. Bond ratings of B currently have the ability to pay principal and interest, though poor economic or business conditions would likely impair the ability to repay principal and interest. Bond ratings of CCC are currently susceptible to default and repayment is dependent on favorable economic and business conditions.

² Source: Barclays Live, as of June 30, 2024. Index: Bloomberg US Corporate High Yield Index.

³ Note that this includes bonds with rating qualifiers, such as "+" and "-". Note also that BB is used interchangeably with Ba, and CCC is used interchangeably with Caa.

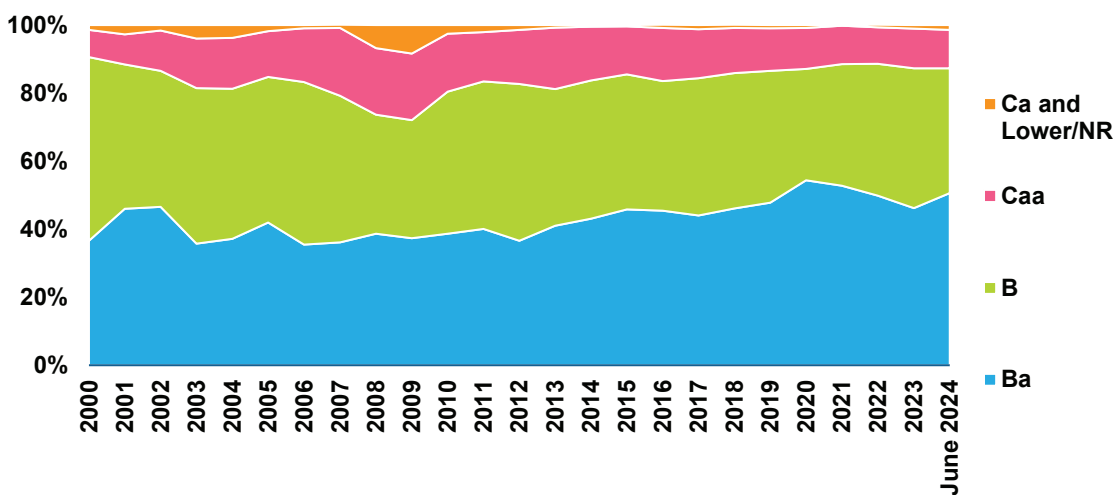


FIGURE 1
Credit Quality of the US High Yield Bond Market

Source: Barclay's Live, as of June 30, 2024. Index: Bloomberg US Corporate High Yield Index.

Sector breakdown

The US high yield market has a different sector composition than that of the broad US stock market. Specifically, US equities tend to be more heavily concentrated in a few sectors while high yield bonds tend to be more evenly distributed. For example, US equities are dominated by the technology and communications sector, which represents roughly one-third of the index as of year-end 2023. The next largest US equity sectors are consumer staples at 17% and materials, industrials, and transportation at a cumulative 15%. Meanwhile, the largest high yield sector, technology and communications, comprises 22% of the index. This is followed closely by the consumer discretionary sector at 21%, and the materials, industrials, and transportation sector at a total of 20%.

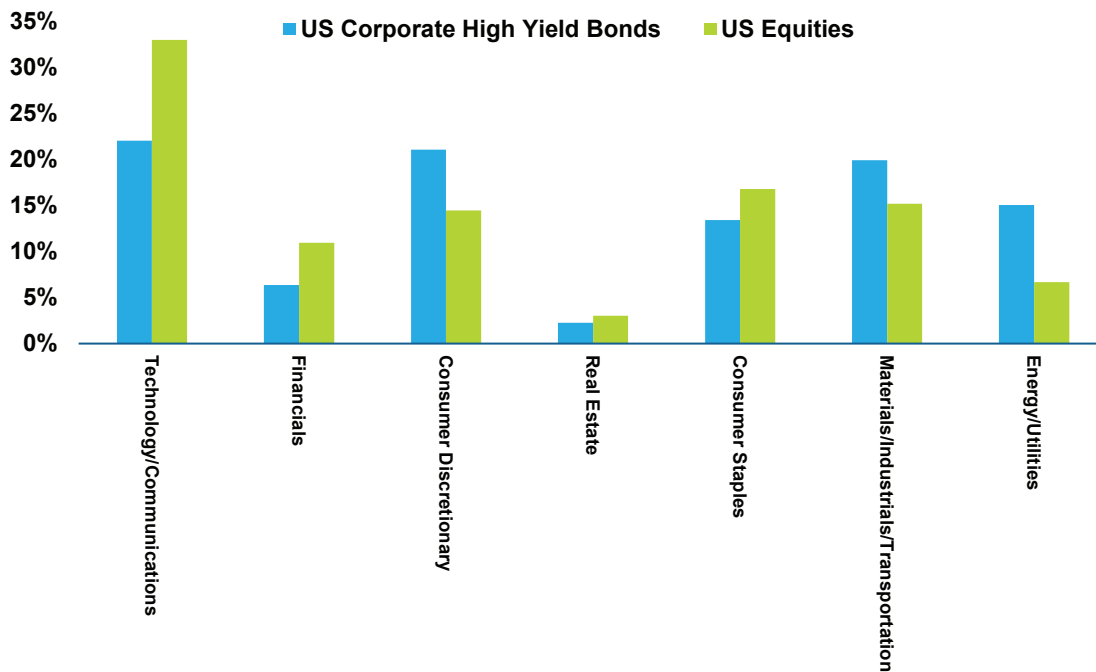


FIGURE 2
Sector Breakdown

Source: Barclay's Live and FactSet as of December 31, 2023. Index: Bloomberg US Corporate High Yield, Russell 3000. Some sectors were grouped together for the purposes of the chart, they include: Technology, Telecommunications, and Communications as "Technology/Communications," Financials, Finance Companies, Banking, Other Finance, and Brokerage Asset Managers Exchanges as "Financials," Consumer Discretionary and Consumer Cyclical as "Consumer Discretionary," Real Estate and REITs as "Real Estate," Consumer Staples, Healthcare, Consumer Non-cyclical, and Insurance as "Consumer Staples," Materials, Industrials, Basic Industry, Capital Goods, and Transportation as "Materials/Industrials/Transportation," Energy, Utilities, Natural Gas, and Electric as "Energy/Utilities." For a breakdown of US Corporate High Yield Bonds' sector weights over time, see the Appendix.

History and growth of high yield bonds

From the late 1800s to the latter part of the 1900s, the high yield market consisted almost entirely of "fallen angels." "Fallen angels" is the term given to debt that is issued with an investment grade rating that subsequently suffers a decrease in credit rating to the point where it sells at below investment grade (i.e., high yield) debt. This might happen, for example, if a formerly strong firm experienced a steep fall in revenues, which increased concerns about its ability to service its debt. During the late 1970s, original issue high yield debt started to gain respectability among investors, borrowers, and underwriters.

The structure of the market, its dynamics, and its risks all changed considerably in the last quarter of the twentieth century. The most dramatic change was a surge of new issue high yield bonds. A combination of factors facilitated the growth of the high yield market. "Disintermediation" of financial markets - in this case, the ability of borrowers to secure funding directly from lenders, without having to go through a bank or another institutional middleman - became the driving force behind the development of the high yield market. In the past, companies that could not earn an investment grade rating could only qualify for short-term bank loans at high interest rates. The high yield market allowed many of these companies to avoid the banks and issue debt directly to investors who were willing to hold longer-term debt paying high coupons.

Additionally, many companies and private equity firms found it profitable to use the high yield market to finance leveraged buyouts (“LBOs”) or capital restructurings. These forces combined to expand the size of the high yield bond market at an incredible pace throughout the 1980s and beyond (see Figure 3). High yield bonds continued to be a popular source of financing, particularly in private equity, after the turn of the century. The market grew to more than \$1 trillion in 2012 and has stayed above that level ever since.

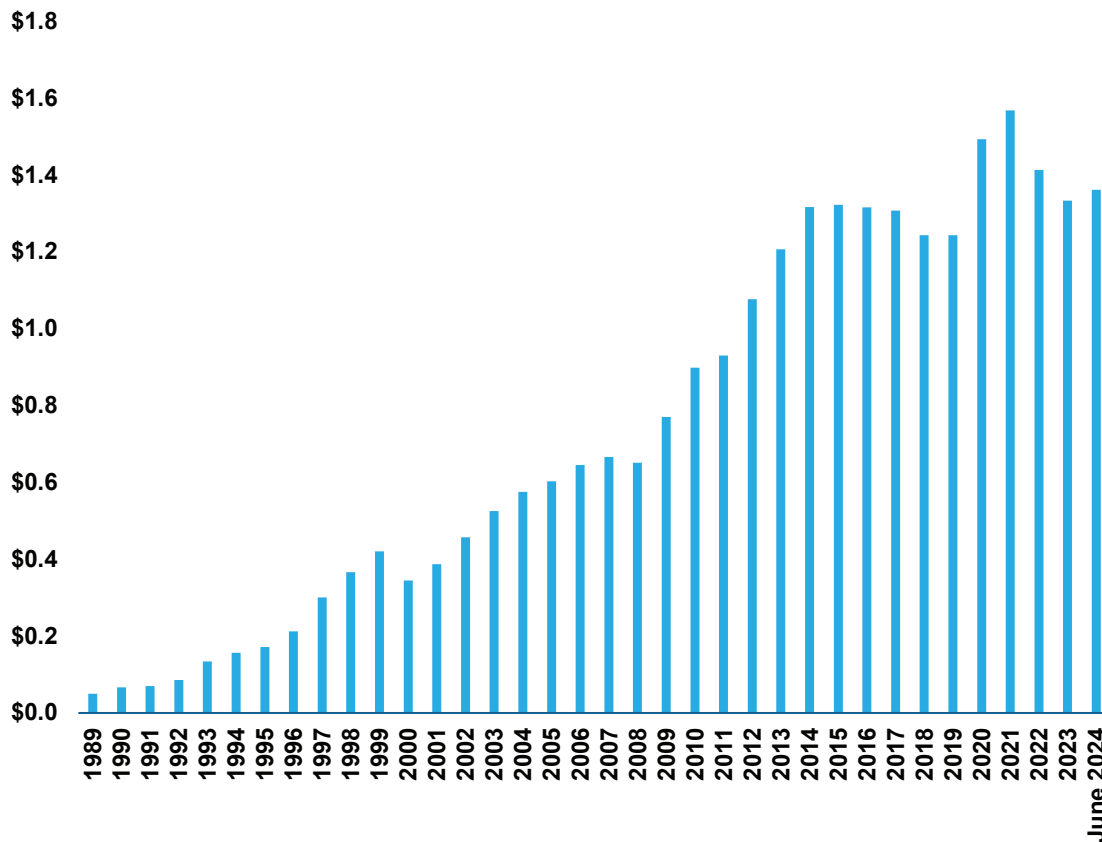


FIGURE 3
Size of the US Corporate High Yield Bond Market (\$ trillions)

Source: Barclay's Live, as of June 30, 2024. Index: Bloomberg US Corporate High Yield, Amount Outstanding.

Nature of risks in high yield bonds

Three primary types of risk affect investors in the high yield bond market: credit/default risk, interest rate risk, and liquidity risk. Although these risks are present in the investment grade bond market, the nature of these risks and their interactions cause the high yield bond market to have distinct risk characteristics from the investment grade market.

Credit/default risk

Credit risk refers to the ability and willingness of a bond issuer to make all their payments on a timely basis. In a default, the bond issuer fails to make payments of interest or principal to the bondholder when they are due. The bondholder may eventually receive all, some, or none of the expected cash flows (including principal repayment). This risk defines the high yield market. Indeed, it is the higher level of default risk that separates it from investment grade bonds.

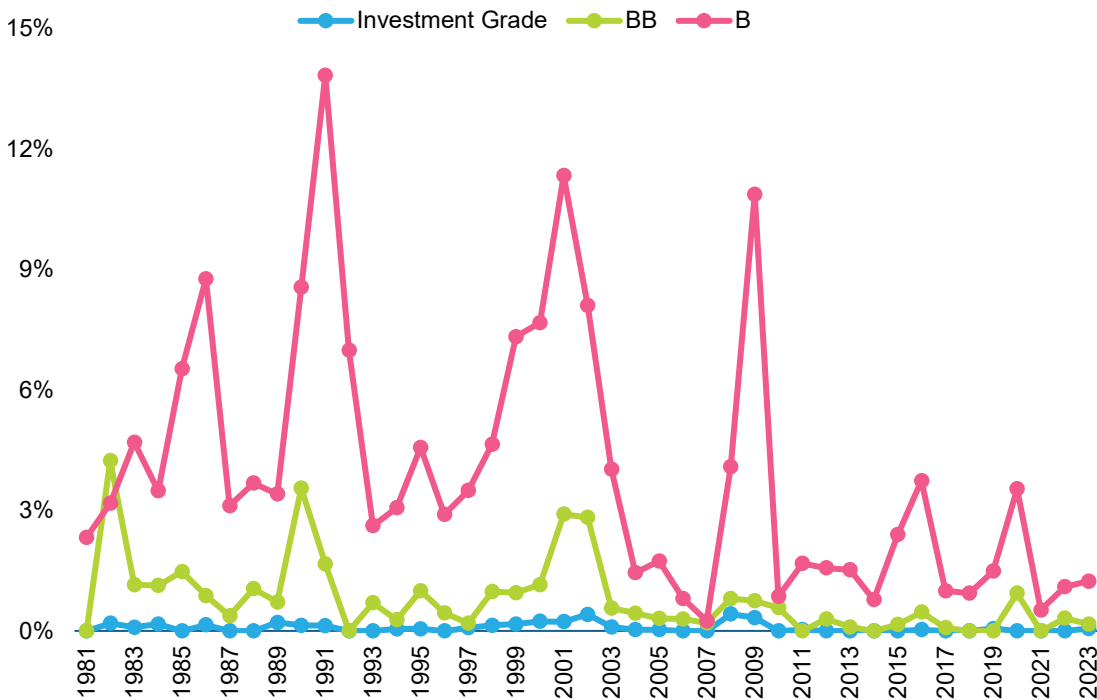


FIGURE 4
Historical Annual Default Rates by Rating

Source: S&P Global Corporate Default Study, as of December 31, 2023.

Default rates overstate the loss due to defaulting securities. Defaults are generally defined as missed payments; hence, some defaulted debt may be paid back if economic circumstances improve. It is not uncommon for bondholders to allow a borrower to miss one or more payments and extend the life of a bond if they believe the lender will be able to make those payments in the future. In addition, high yield debt that defaults due to bankruptcy has historically been recoverable at around 30-50 cents on the dollar, though this amount can be issue-specific based on seniority and capital structure as well as vary during different market conditions.⁴ The calculation of actual loss to the investor from default is:

⁴ Source: Moody's Annual Default Study, February 26, 2024. The long-term average recovery rate for senior unsecured corporate bonds (issuer weighted) was 37.6% from 1983-2023. Over the same period, the long-term average for first lien corporate bonds (issuer weighted) was 54.8%.

$$\begin{aligned} \text{Amount lost} &= \text{loss of principal} + \text{loss of coupon payments} \\ &= \text{default rate} \times \text{principal} \times (1 - \text{recovery rate}) + \text{default rate} \times \text{coupon payment} \end{aligned}$$

High yield investors expect that some companies will default, but most will not, and the higher yield offered by these bonds compensates the investor for those defaults that do occur.⁵ The short-term manifestation of the default risk that investors believe they face (and compensation they demand) is expressed via credit spreads – that is, the difference between the yield on high yield bonds and those of US Treasuries of similar maturity. It is the widening and tightening of credit spreads that drives the returns of high yield bonds in the short term (see Figure 5). Over the past 35 years, credit spreads for the high yield market have averaged ~5.1%. However, the range has been quite wide, often reflecting major market events, with the spread fluctuating from a low of 2.3% to 18.3% during the peak of the Global Financial Crisis (“GFC”).

⁵ For example, take a hypothetical portfolio of high yield bonds worth \$10 million with an average yield of 9.0% making annual coupon payments. If the portfolio experiences an annual default rate of 4% and recovers 40% of principal (the historical averages), then the portfolio loses \$276,000, or 2.8%, due to these defaults. However, the portfolio would still experience a total return of 6.2%.

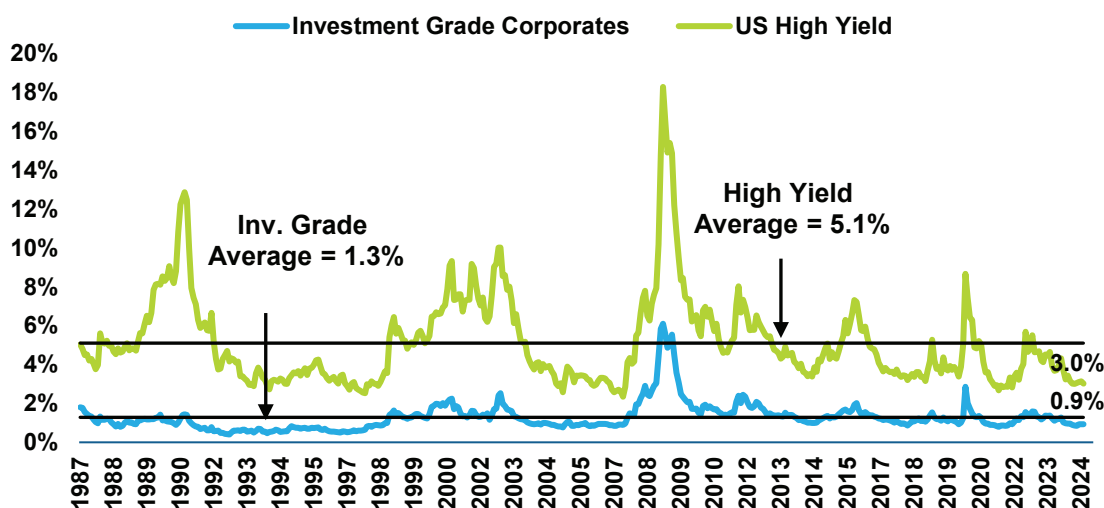


FIGURE 5
US Investment Grade and High Yield Credit Spreads

Source: Bloomberg as of August 31, 2024. High Yield is proxied by the Bloomberg High Yield Index and Investment Grade Corporates are proxied by the Bloomberg US Corporate Investment Grade Index. Spread is calculated as the difference between the Yield to Worst of the respective index and the 10-Year US Treasury yield.

Interest rate risk

While interest rate risk is the driving force for investment grade bonds, it plays less of a role in high yield bonds. The main reason for this is that credit risk tends to overwhelm the effect of changing interest rates on a portfolio of high yield bonds. That is, the risk of a potential default, as reflected in changes in credit spreads, has a greater impact on the market value and return of a high yield portfolio than changes in interest rates. This is partly because high yield bond issuers tend to issue shorter term bonds than their investment grade counterparts (see Figure 6). This results in lower duration, and hence less interest rate sensitivity. Further, many high yield bonds have “call” provision schedules that allow the issuer to refinance early if rates drop, effectively reducing the duration even further.

	High Yield	Investment Grade
Average Maturity (Years)	4.86	8.43
Average Duration (Years)	3.14	6.13

FIGURE 6
Maturity and Duration for High Yield and Investment Grade Bonds

Source: Barclays Live, as of June 30, 2024. Indices used: Bloomberg US Corporate High Yield and Bloomberg US Aggregate.

In addition, interest rate volatility and default rate volatility tend to cancel each other out. Investment grade bonds perform worse when interest rates are rising, a situation that generally occurs in response to strong economic conditions. In this environment, defaults would be expected to shrink, and high yield bonds would consequently be expected to perform better than investment grade bonds.

Liquidity risk

Liquidity risk has been a potential concern since the advent of the high yield market. Under normal market circumstances, liquidity is not an issue for most high yield bonds (e.g., those rated BB and B). However, during periods of significant market stress – that is, when liquidity tends to be in highest demand – liquidity is likely to dry up. This may be expressed via (much) wider bid-ask spreads (which makes it more expensive to transact), or in extreme cases, the inability to find a buyer for a security. Figure 7 below depicts how high yield bonds' bid-ask spreads increased dramatically during both the GFC in 2008 as well as during the outbreak of the Covid-19 pandemic in 2020, signifying a drop in liquidity in the high yield market.

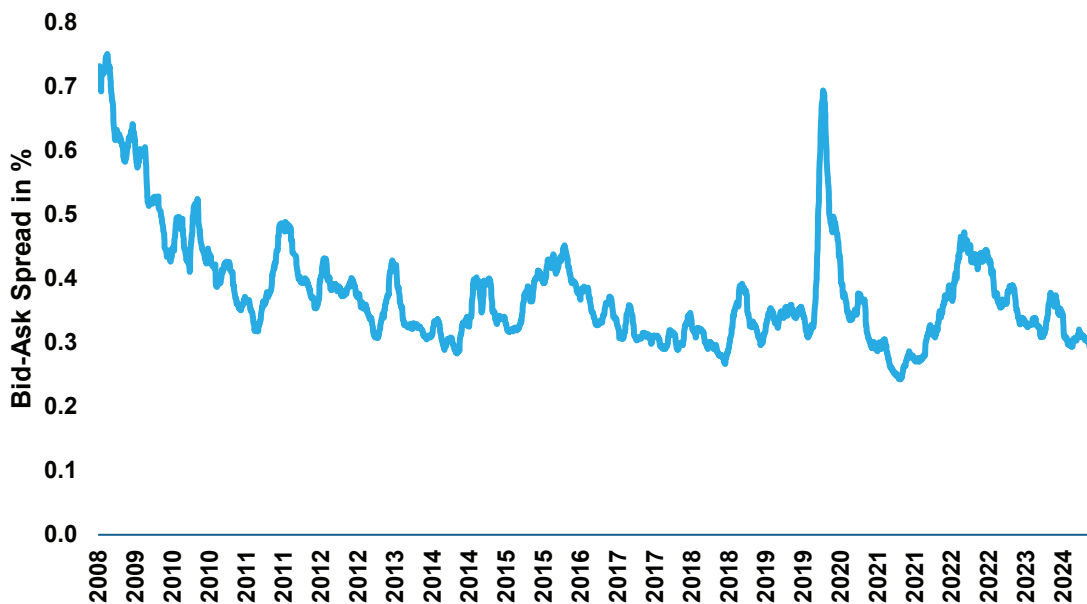


FIGURE 7
Effective Bid-Ask Spread of High Yield Bonds

Source: BlackRock from BofA, as of July 31, 2024. Actual/realized bid-ask spread based on recorded institutional-sized transactions (size greater than \$1 million) where a dealer is on one side of the transaction.

Characteristics of high yield bonds

Expected return and volatility

Even though some investors call them “junk” bonds, high yield bonds are generally less risky than US equities. Historically, annualized volatility for high yield bonds has been lower than for stocks, partly because high yield debt is ahead of equity in the capital structure. Thus, if a company defaults, its bondholders have access to the company’s assets before its stockholders. High yield investors consequently have a greater chance of recovering at least part of their investment. Furthermore, high yield returns have a large income component, which may stabilize their performance in comparison with stocks. On the other hand, because companies with debt rated below investment grade are more likely to experience a default than are companies rated investment grade, their debt is, by definition, riskier. Therefore, high yield bonds should theoretically produce returns between investment grade bonds and equities, while also exhibiting volatility between the two asset classes. This theory has historically held true over the long term, as shown in Figure 8.

	Investment Grade Bonds	High Yield Bonds	US Equity
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Annualized Returns	5.9%	8.2%	11.5%
Annualized Standard Deviation	4.4%	8.4%	15.6%

FIGURE 8
Annualized Return and Volatility Since 1985

Source: Investment Metrics, as of June 30, 2024. Indexes: Bloomberg US Aggregate, Bloomberg US Corporate High Yield Index, Russell 3000. Period is January 1, 1985, to June 30, 2024.

One way an investor can estimate future returns is by applying projected default and recovery rates to the market’s current yield to maturity (or more appropriately, the yield to worst, to account for likely call experience). For example, as of June 30, 2024, the Bloomberg US Corporate High Yield Index exhibited a yield to worst of 7.9%.⁶ By subtracting a default rate of 4% and adding back a recovery rate of 40% (approximations of their long-term averages), an investor could potentially expect a return of approximately 5.5%, assuming credit spreads do not change.

⁶ Source: Barclay’s Live, as of June 30, 2024. Index: Bloomberg US Corporate High Yield Index.

Figure 9 shows the starting yield to worst for the high yield bond market and the return over the subsequent ten years. The chart illustrates that while the two track similar paths, there is typically a gap between them. This gap between returns and yield is primarily due to defaults. Further, the gap tends to be widest during periods of market distress (e.g., the GFC).

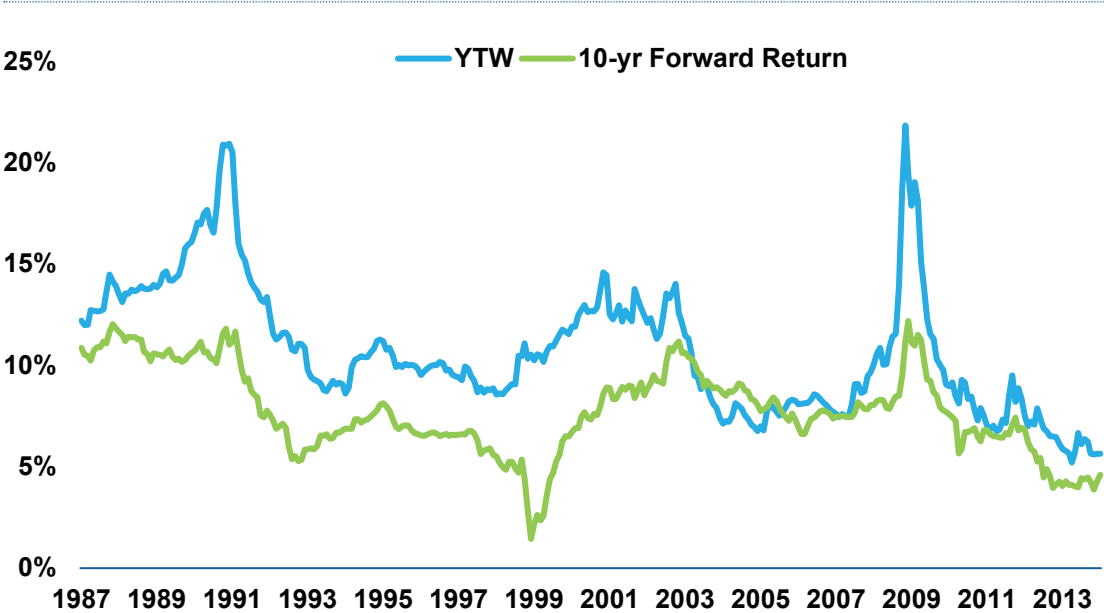


FIGURE 9
Yield to Worst and Returns for High Yield Bonds

Source: Bloomberg, as of December 31, 2023. Index: Bloomberg US Corporate High Yield Index.

Correlations

Historically, high yield bonds tended to be somewhat uncorrelated with investment grade bonds, exhibiting an average correlation of 0.32, though this has varied depending on market conditions. However, high yield bonds have been more positively correlated with US equities at 0.65 (see Figure 10).

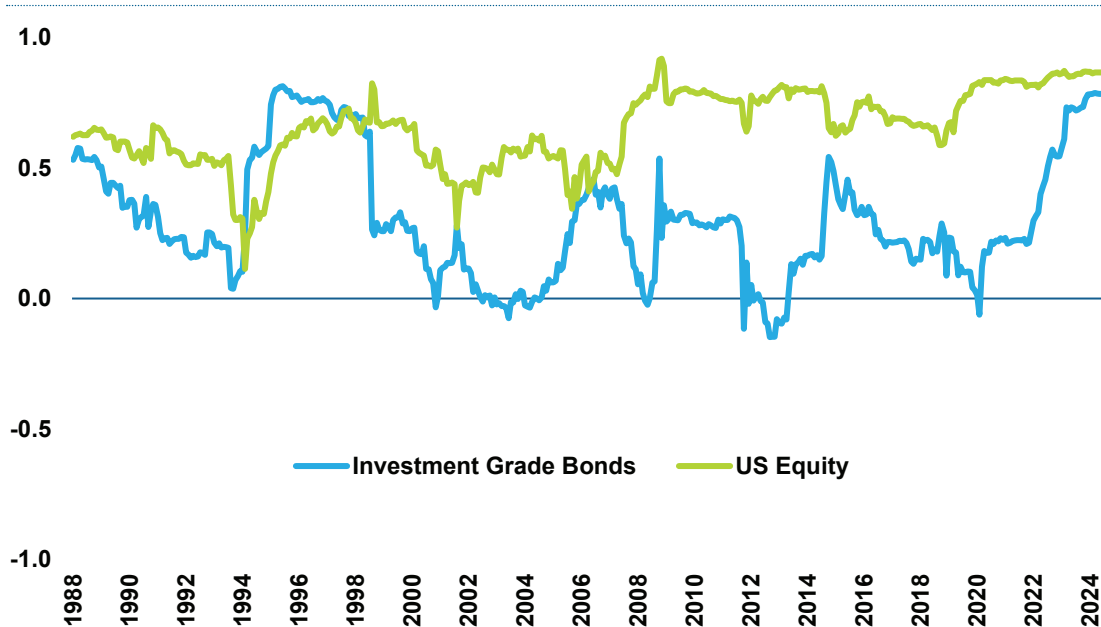


FIGURE 10
Rolling 3-Year Correlation with High Yield Bonds

Source: Investment Metrics, as of June 30, 2024. Indexes: Bloomberg US Aggregate, Bloomberg US Corporate High Yield Index, Russell 3000.

Correlations between high yield bonds and other risky asset classes, such as US equities, tend to be higher in down markets. This is unsurprising, since, as was noted earlier, credit risk is the primary risk for high yield bonds, and this risk tends to be inversely related to the health of the overall economy. Economic growth is arguably the most important risk factor for most risky assets.

Figure 11 shows the annual returns for high yield bonds, investment grade bonds, and US equities since 1985. The chart shows that high yield bonds tend to move in the same direction as US equities in stressed markets, such as in 2008. This heightened correlation may also persist during the rebound from a period of market stress, such as in 2009.

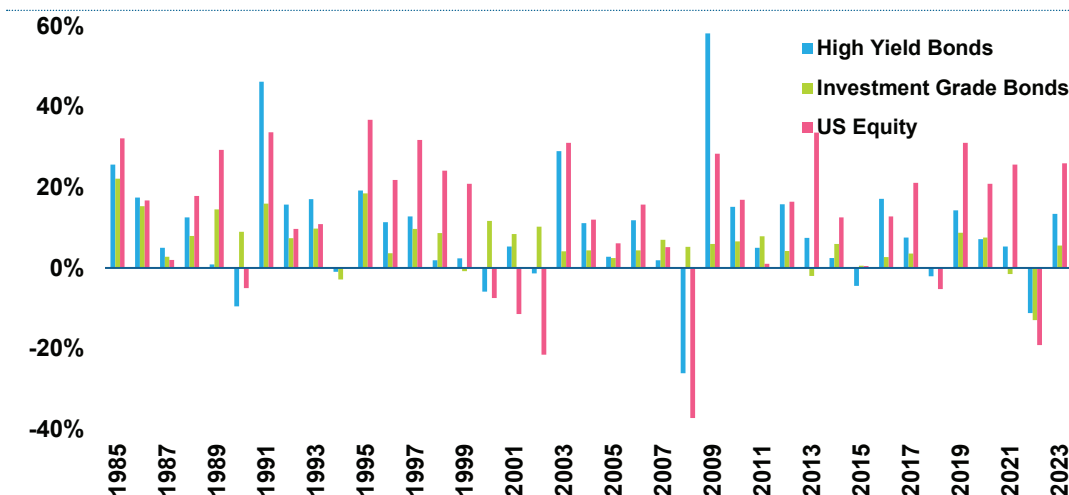


FIGURE 11
Historical Annual Returns

Source: Investment Metrics, as of December 31, 2023. Indexes: Bloomberg US Aggregate, Bloomberg US Corporate High Yield Index, Russell 3000.

Return behavior in various environments

High yield bonds have typically performed well when investors' expectations about the economy are positive and the outlook for corporate America (and hence, the prospect of making coupon payments) is good. Conversely, in recessionary periods – when defaults tend to rise – high yield returns have lagged. Consistent with their long-term returns and capital market expectations, high yield bonds' returns have generally been below investment grade bonds and above US equities during most of the historical market downturns of the past 35 years (see Figure 12).

Scenario	Investment Grade Bonds	High Yield Bonds	US Equities
Post-COVID Rate Hikes (Jan 2022-Oct 2023)	-15.4%	-7.1%	-11.6%
COVID-19 Market Shock (Feb 2020-Mar 2020)	-0.9%	-20.8%	-35.0%
Global Financial Crisis (Oct 2007-Mar 2009)	8.5%	-22.8%	-45.8%
Popping of the TMT Bubble (Apr 2000-Sep 2002)	28.6%	-6.3%	-43.8%
Early 1990s Recession (Jun-Oct 1990)	3.8%	-12.9%	-14.7%

FIGURE 12
Historical Downturn Scenarios

Source: Bloomberg and Meketa calculation. Returns are cumulative for the time period over which the scenario occurred.

Role of high yield bonds

In many cases, more efficient portfolios could potentially be achieved by incorporating high yield bonds into a traditional stock-bond portfolio. Even a small allocation to high yield bonds could potentially result in a better risk-adjusted return than a portfolio comprising solely of stocks and investment grade bonds. Historically, a portfolio with a 28% allocation to high yield (and 50% US equity / 22% US bonds) would have produced a better return for the same amount of risk than a traditional 60% US equity / 40% US bond portfolio.⁷ Meanwhile, a portfolio allocated 12% to high yield bonds (and 55% US equity / 33% US bonds) would have produced the same return with a lower level of risk. Figure 13 below depicts high yield bonds' historical impact on risk and return in stock and bond portfolios.

⁷ Source: Investment Metrics, as of June 30, 2024. Indexes: Bloomberg US Aggregate, Bloomberg US Corporate High Yield Index, Russell 3000. Period is January 1, 1985 to June 30, 2024.

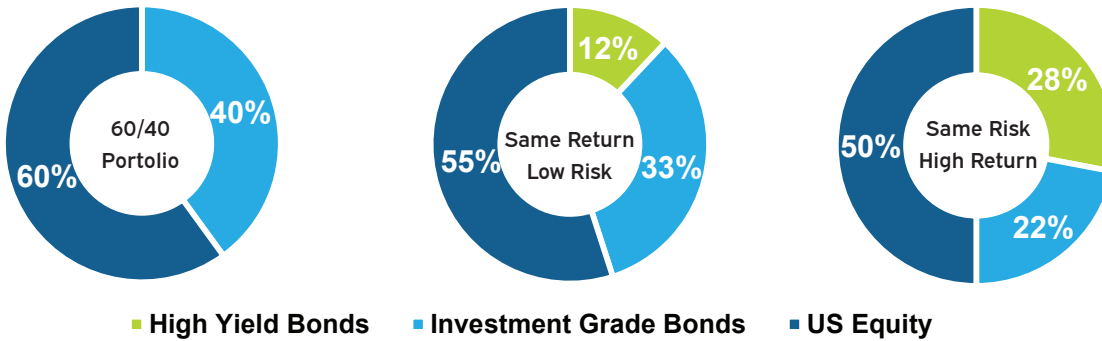


FIGURE 13
High Yield Bonds’
Historical Impact When
Added to a Portfolio

Source: Investment Metrics, as of June 30, 2024. Indexes: Bloomberg US Aggregate, Bloomberg US Corporate High Yield Index, Russell 3000. Period is January 1, 1985 to June 30, 2024.

	60/40 Portfolio	Portfolio with High Yield Higher Return & Same Volatility	Portfolio with High Yield Lower Volatility & Same Return
Annualized Return	9.3%	9.4%	9.3%
Standard Deviation	11.1%	11.1%	11.0%

Based on Meketa Investment Group’s 2024 20-year forecasts, a portfolio that allocates 20% to high yield bonds would be more efficient than a traditional 60% US equity / 40% US bond portfolio.⁸ Therefore, adding high yield to a traditional stocks and bonds portfolio may boost expected returns and risk-adjusted returns.

⁸ Source: Meketa Investment Group’s 2024 Capital Markets Expectations.

These scenarios assume an allocation to high yield is taken from both stocks and bonds. If an investor wanted to focus on increasing their expected return, they could take the full allocation from investment grade bonds. However, doing so would expose the portfolio to greater downside risk during equity downturns.

Implementation issues

Market liquidity

Liquidity for the high yield bond market does not approach that for investment grade bonds because of the small relative size of the high yield bond market and the limited number of participants. Consequently, it is more expensive to trade high yield bonds than it is to trade investment grade corporate bonds. Bid-ask spreads range broadly for high yield bonds, depending on quality and other factors, with the average effective bid-ask spread since 2009 at 37bp, though their range has spanned from 24bp to 75bp.⁹ For less liquid issues, effective bid-ask spreads have been even wider. Further, during periods of high volatility (e.g., the outbreak of the COVID pandemic), spreads for high yield bonds widen, at least temporarily.

⁹ Source: BlackRock from BofA, as of July 31, 2024. Actual/realized bid-ask spread based on recorded institutional-sized transactions (size greater than \$1 million) where a dealer is on one side of the transaction.

The limited liquidity of high yield bonds makes it beneficial for managers to have skilled and experienced trading personnel. In addition, the amount of high yield bond assets that one firm can manage effectively to maintain the integrity of the strategy’s objectives is constrained by the relative illiquidity of this market. For example, some managers targeting lower quality or smaller issues may close their products to new investors when assets under management reach the \$5 to \$10 billion range.

Active and passive management

For institutional investors, specialized high yield bond managers offer many different products. For more than two decades, over one-hundred different firms have offered dedicated high yield bond products (see figure 14).

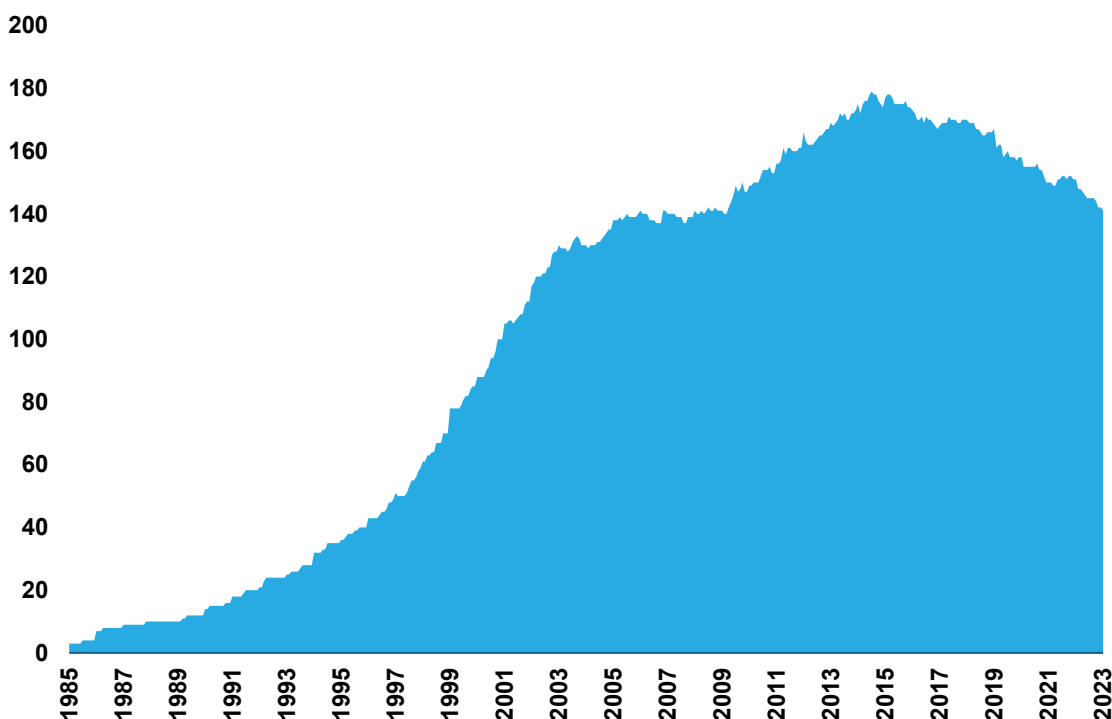


FIGURE 14
Funds in the Actively Managed High Yield eVestment Universe

Source: eVestment, as of December 31, 2023. US High Yield Fixed Income eVestment universe. Chart represents monthly active high yield bond funds. See Meketa's Manager Alpha Whitepaper for more information on the fund filtering process.

Figure 15 compares the average alpha (outperformance/underperformance) for several universes of active managers versus their respective benchmarks for the 10 year period ending December 31, 2023. The data implies that the average active high yield bond manager has added a modest amount of alpha, before fees. Once the average fee is taken into account, active management has not been beneficial for the median manager in high yield over the past ten years.

	Median <i>Gross</i> Excess Annualized Return (bp)	Median Fee on \$100M (bp)	Median <i>Net</i> Excess Annualized Return (bp)
High Yield Bonds	+18 bp	50 bp	-32 bp
Investment Grade Bonds	+38 bp	28 bp	+10 bp
US Large Cap Equity	-45 bp	50 bp	-95 bp

FIGURE 15
Trailing 10-Year Median Outperformance of Active Managers

Source: Meketa analysis of data from eVestment Alliance. Data as of December 31, 2023. Gross of fees. Outperformance represents the geometric mean of manager returns over one year minus the benchmark return for the period where data is available. For more information see Meketa's Manager Alpha Whitepaper. Fee data from eVestment Alliance. Median sliding fee on \$100mn for all product types as of June 2024. Backdated fee information is unavailable.

However, one of the primary reasons for investing in active high yield bond managers is downside protection. Since there has not been a substantial credit-related downturn over the past 10 years, this may partly explain why active high yield has not appeared as attractive in the last decade. Since many active managers often take on less risk than the high yield index, in a low default environment, their lower risk profile implies that they are likely to underperform.

It is important to note that the fees listed in Figure 15 are the “rack rate” fees. Depending on the situation and size of the mandate, an investor may be able to negotiate a lower fee than those listed above. Meketa’s observation is that management fees for actively managed high yield bond portfolios typically range from 40 to 60 basis points per year for institutional investors.¹⁰ Custody fees, though not prohibitive, will vary with the size and turnover of the portfolio.

¹⁰ Source: Meketa observations in the high yield bond market and eVestment US High Yield Bond fee percentiles.

Interquartile spreads can be interpreted as how much potential value lies in selecting superior active managers within each asset class. Over the past ten years, high yield bonds’ interquartile spread of 2.1% was lower than US large cap equity’s 4.8% and higher than investment grade bonds’ 0.9% (see Figure 16). This may imply that high yield bonds provide less opportunity to generate manager alpha compared to US large cap equity, but more opportunity compared to the traditional US bonds’ universe.

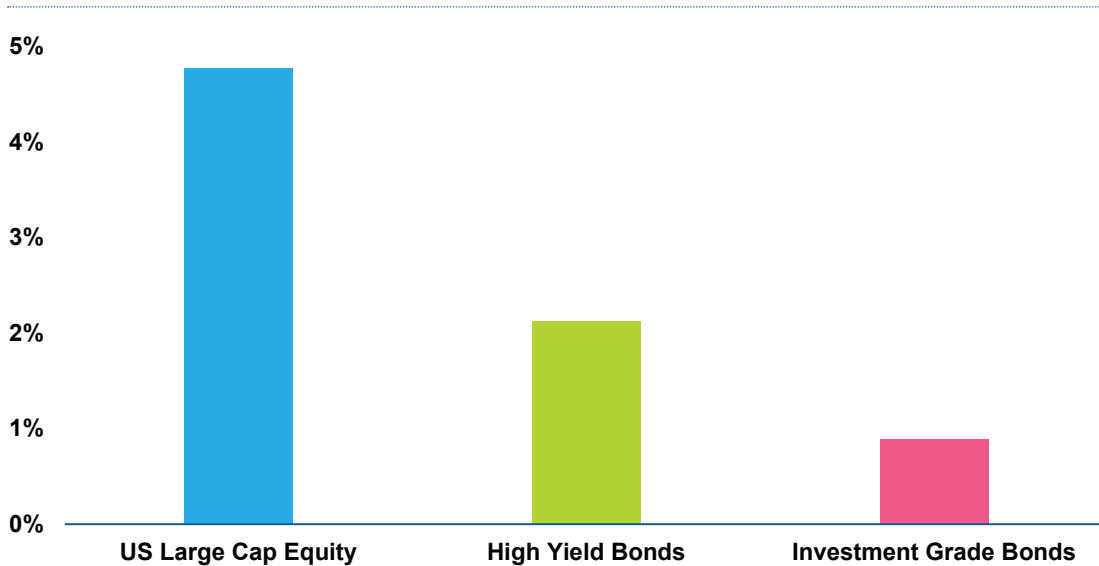


FIGURE 16
Trailing 10-Year Interquartile Spreads

Source: Meketa analysis of data from eVestment Alliance. Gross of fees. Data is for the trailing ten years as of December 31, 2023. Interquartile spreads are evaluated by taking the difference between the geometric average of the 75th percentile return and the 25th percentile over a rolling 12-month period.

Moreover, high yield bonds’ interquartile spread has varied over time and with different market environments. For example, Figure 17 shows that high yield bonds’ interquartile spread has historically widened during market downturns such as the popping of the dot-com bubble and the GFC.

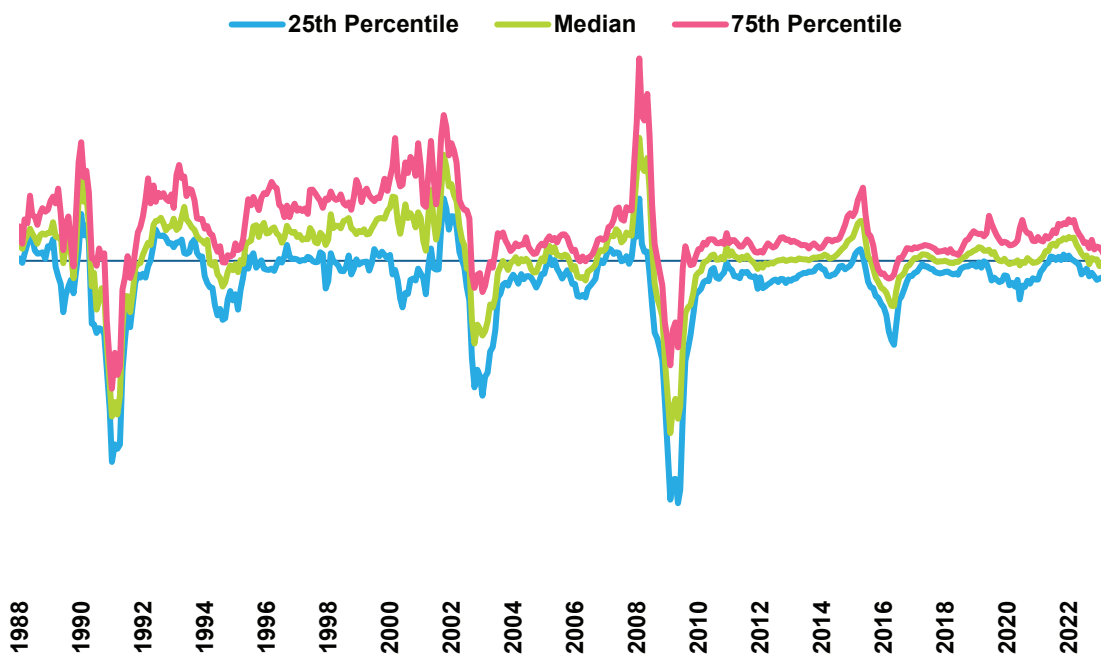


FIGURE 17
Rolling 12-Month
Outperformance of Active
High Yield Bond Managers

Source: Meketa analysis of data from eVestment Alliance. Data as of December 31, 2023. Gross of fees. Inception date starts when there are at least 10 funds to evaluate and goes through December 31, 2023. Due to the small number of funds at inception, some of the asset classes' early year relative returns may be skewed. Outperformance is defined as the geometric mean of the manager performance minus the benchmark performance (of the Bloomberg Corporate High Yield Index) over a rolling 12-month period.

Historically, passive investment in high yield bond indexes has been difficult, as many issues in comprehensive indexes may trade only infrequently as bondholders need only hold a given security to maturity to recover their initial investment amount. As a result, true replication of high yield bond indexes is not feasible unless the mandate tracks an index that is constrained to only the largest, most liquid issues. Passive managers have traditionally used optimization techniques to try to match overall index characteristics (e.g., issuer, sector, and credit exposure) despite illiquid underlying issues.

In some cases, the performance of passive products may deviate from the underlying index due to short-term price discrepancies. In times of strained market liquidity, these vehicles can provide more timely pricing information than model pricing in the underlying indexes. For example, during the GFC, high yield exchange traded funds maintained liquidity through the basket creation/redemption mechanism despite a substantial portion (up to 30%) of underlying bonds not otherwise trading.¹¹ This dynamic can counterintuitively raise apparent tracking error despite pricing for the passive vehicle more closely following that in the underlying market.

¹¹ Source: CFA Institute, "A Comprehensive Guide to Exchange-Traded Funds (ETFs)," p. 117, May 15, 20215.

Benchmarks

There are two primary indexes used for benchmarking high yield portfolios: the Bloomberg US Corporate High Yield Index and ICE BofA US High Yield Index. Both are broad based, diversified, market capitalization weighted indices. In addition to these main two indices, there are several less commonly used high yield indexes such as the FTSE High Yield Index as well as indices from JP Morgan, S&P, and iBoxx. However, because Bloomberg and ICE BofA are the two most commonly used indexes, we focus on them throughout this section.

The characteristics of these two high yield bond indices are very similar in terms of calculation methodology, number of issues/issuers, total market value, credit quality, average price, spread, and yield. One small difference is the minimum issue size as Bloomberg allows slightly smaller issues of \$150 million or more while ICE BofA requires \$250 million. This is the primary reason why the Bloomberg index has slightly more issues and issuers.

	Bloomberg US Corporate High Yield Index	ICE BofA US High Yield Index
Weighting	Market-Value Weighted	Market-Value Weighted
Inception	1983	1986
Number of Issues	1,932	1,858
Number of Issuers	968	935
Min Issue Size (\$ million)	\$150	\$250
Total Market Val (\$ billion)	\$1,311	\$1,285
Average Price	\$96.11	\$96.06
Yield to Worst	7.56%	7.59%
Option Adjusted Spread	313	315
Modified Duration	3.14	3.15
S&P Rating	B+	B+
Moody's Rating	B1	B1

FIGURE 18
Summary of the Primary High Yield Bond Index Characteristics

Source: BlackRock, as of July 31, 2024. Note that the indices have changed provider names over time. For example, the Bloomberg index was previous Barclays and Lehman before that; the ICE BoA index was previously Merrill Lynch.

Although dispersion between index returns should be minimal over longer periods, short term deviations make it important to choose the proper index for comparison to the style of the manager hired.

Timing

Even sophisticated investors may err in presuming that the recent past will persist indefinitely. An investor who was enamored by the relatively steady returns from 2004-2007 would have suffered considerable losses in 2008. In contrast, investors who entered the high yield market during the tail end of the GFC would have seen considerable gains in the following decade.

Because high yield bonds have more volatility than investment grade bonds, but less volatility than US equities, the risk of mistiming an entry into the high yield bond market is moderate, but not as high as with equities. The chart below shows that, during the market downturn from 2000 to 2002 as well as that of the GFC, high yield bonds experienced “less worse” negative returns compared to US equities but worse returns compared to investment grade bonds.

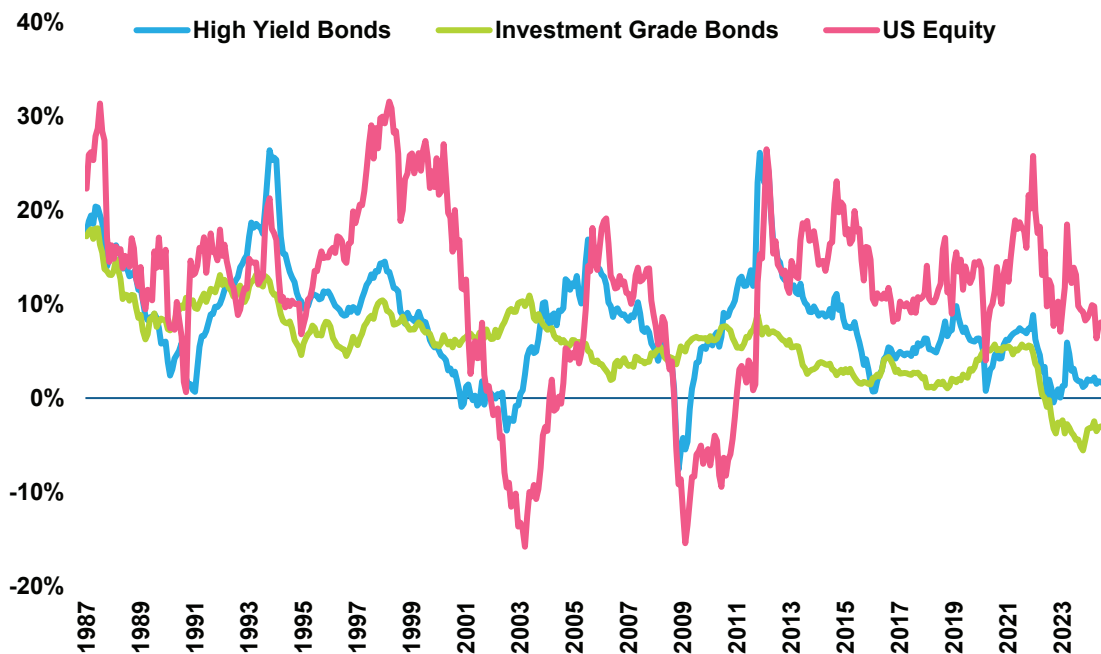


FIGURE 19
Rolling 3-Year Returns

Source: Investment Metrics, as of June 30, 2024. Indexes: Bloomberg US Aggregate, Bloomberg US Corporate High Yield Index, Russell 3000.

Unsurprisingly, the most profitable times to invest in high yield bonds have been when yields were historically high (i.e., when credit spreads were at their widest). In the final two months of 1990, the spread for the Bloomberg US Corporate High Yield Index peaked at approximately 1,300 basis points (thirteen percentage points) over Treasuries. Subsequently, the high yield market produced an annual return of 46%, 16%, and 17% in the next three calendar years, respectively. In late 2002, spreads approached the 1,000 basis point mark, and high yield bonds once again rebounded, producing an annual return of 29% in 2003. In November 2008, spreads hit an all-time high of 1,800 basis points, and the subsequent annual return in 2009 was 58%.

Valuations for high yield bonds may be more predictive over the short term than they are for other asset classes. However, it could be disadvantageous to completely exit the asset class, even when valuations turn unfavorable. Instead, an investor may want to maintain a minimum (i.e., “toehold”) high yield bond allocation. Doing so could help enable an investor to more rapidly implement a re-allocation when markets shift, without the delays of having to approve a manager and set up an account.¹²

The quality spectrum

Over long periods, the portion of high yield indexes with bonds rated BB and B have produced better absolute and risk-adjusted returns than high yield bonds rated CCC-D (see Figure 20). In particular, the BB-rated portion of the index experienced a higher risk-adjusted return, as indicated by the superior Sharpe ratio.¹³ Historically, investors have not been well rewarded for holding a dedicated allocation to the portion of the index rated CCC or lower. These bonds have, historically, produced

¹² This approach presupposes that an investor’s governance structure would allow it to make such a shift with relative speed. If not, an alternative could be to delegate the decision and timing to a broad-mandate fixed income manager.

¹³ The Sharpe ratio is a measure of risk-adjusted return that evaluates the performance of an investment by adjusting for its risk. It is calculated as the return of the investment minus the risk-free return (typically for cash), divided by the standard deviation of the investment’s returns. The Sharpe Ratio helps to understand if the return of an investment is commensurate with the risk taken.

inferior returns, while experiencing higher volatility, contrary to modern portfolio theory, which expects higher returns over long periods to compensate for increased risk. However, CCC and lower rated debt has also produced significantly higher maximum outperformance (and underperformance) months compared to the BB- and B-rated bonds. This may lead some investors to consider constructing guidelines that permit managers to shift tactically into and out of bonds rated CCC and lower depending on market conditions.

	BB	B	CCC-D
Annualized Return	7.4%	6.2%	5.2%
Annualized Risk	7.2%	8.6%	27.4%
Sharpe Ratio	0.69	0.44	0.10
Best Month	7.8%	10.8%	75.1%
Worst Month	-13.7%	-14.2%	-39.9%

FIGURE 20
Historical Performance
of High Yield Bonds by
Rating

Source: Bloomberg, as of June 30, 2024. Index used: Bloomberg Ba US High Yield index, Bloomberg B High Yield index, Bloomberg Ca to D US High Yield Index. Period is January 1, 1995 to June 30, 2024.

Gaining exposure

Investors who seek a custom portfolio, or customized guidelines, must utilize a separate account structure. The investment manager could then construct a portfolio to match the requirements of the investor. While there may be some exceptions depending on the style of high yield strategy or individual asset manager, we assume that investors who are allocating less than \$50 million are investing in commingled fund structures.

An expanded investable universe

Many high yield managers include securities in their investable universe that are not considered traditional high yield debt (or included in the benchmarks), but that either trade like high yield bonds or are a hybrid security. These securities may include bank loans (i.e., leveraged loans), “busted” convertible bonds, preferred stock, emerging market debt, credit default swaps, and CLOs and similarly structured debt. Managers with such wide discretion may be more properly described as “opportunistic.”

Investors should decide whether to allow a high yield manager to invest in these ex benchmark instruments on whether they believe their chosen manager has the appropriate level of expertise to do so. There are advantages to giving managers wider discretion to choose between different credit instruments. However, these securities may pose risks that are not present in the benchmark. Hence, guidelines should be crafted to control their impact on returns, and investors should anticipate a larger amount of tracking error.

Some managers and investors have embraced “multi-asset credit” strategies that allow them to be even more opportunistic and take advantage of the evolving credit markets. These strategies can engage in relative value trades between high yield bonds and bank loans, and in some cases, own private debt. The contrast between the fixed rate nature of high yield bonds and the floating rate nature of bank loans can result in significant price movements based on changes in interest rates or Fed policy. Moreover, it is increasingly common for an issuer to consult with a few large asset managers (who invest across the capital structure) about how much debt to issue simultaneously across syndicated bank loans, public high yield bonds, and private debt. The managers will advise as well as participate in buying these new issues, and, in some cases, they can influence the amount issued and the terms of the issuance.

Summary

Despite the nickname of “junk” bonds, high yield bonds are less risky than public equities. Nevertheless, because these companies are more likely to experience a default than companies who are rated investment grade, they are riskier than investment grade bond issuers. Consequently, high yield bonds should produce returns between investment grade bonds and equities, while also exhibiting volatility between the two asset classes. Due to their modest correlation with other asset classes and attractive historical returns, the inclusion of high yield bonds in a traditional stock-bond portfolio allows investors to construct more efficient portfolios.

Three types of risk permeate the high yield bond market: liquidity risk, interest rate risk, and default risk. Liquidity risk became an increasing concern post GFC, but it tends to be less impactful until periods of market stress. The most meaningful risk is default risk, though default rates overstate the actual loss an investor experiences. Interest rate risk plays only a minor role, because duration is much lower, high yield bonds can be called early, and default risk tends to overwhelm the effect of changing interest rates on a portfolio of high yield bonds.

The historical data implies that active management has not been fruitful for the median manager, net of fees. However, interquartile spreads imply that there is ample room for above-average managers to add value. Investors should consider the different options for accessing the high yield market, ranging from passive strategies at one end of the spectrum to active multi-asset credit strategies at the other end of the spectrum.

Appendix

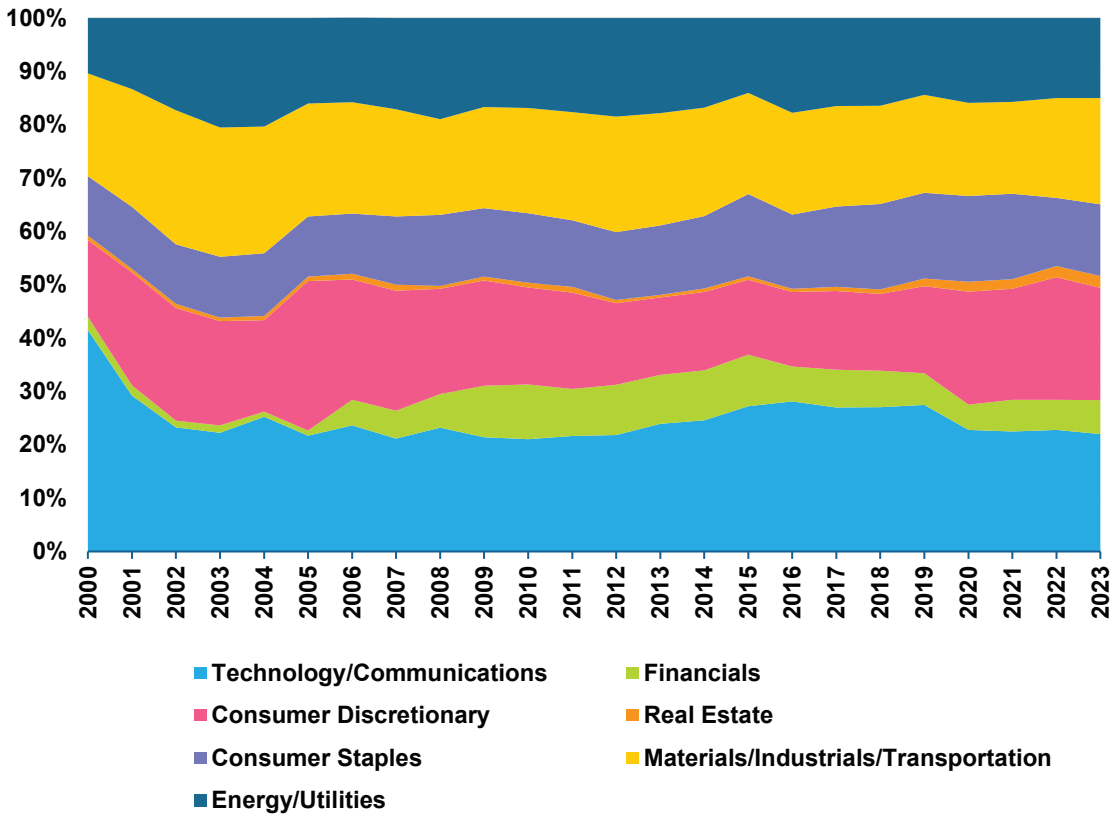


FIGURE 21
Sector Breakdown of the US Corporate High Yield Bond Index

Source: Barclay's Live, as of December 31, 2023. Index: Bloomberg US Corporate High Yield Index.

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