MORNINGSTAR Indexes

Unlocking Superior Diversification Benefits: Leveraged Loans Versus High-Yield Bonds

Leveraged loans offer investors an effective alternative to high-yield bonds for portfolio diversification.

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Executive Summary

Yield is a key consideration for investors allocating to debt markets. The low interest-rate environment prevalent in the US after the global financial crisis of 2008 made investors explore high-yield and leveraged loans to enhance portfolio returns. However, asset-allocation decisions are not based on yield considerations only. Investors also consider asset classes that provide diversification benefits and enhance the risk-adjusted returns of a portfolio. High-yield bonds and leveraged loans both offer exposure to non-investment-grade debt, but they exhibit distinct risk-return profiles across market cycles. Leveraged loans are floating-rate instruments, meaning their interest payments adjust with benchmark rates, making them less sensitive to changes in interest rates. In contrast, high-yield bonds, typically with fixed-rate coupons, are more exposed to interest-rate risk and experience greater sensitivity to interest-rate changes. The decision to choose one over the other boils down to the diversification benefits provided. This research compares the Morningstar US High-Yield Bond Index and the Morningstar LSTA US Leveraged Loan Index in terms of how they help diversify an investor's portfolio.

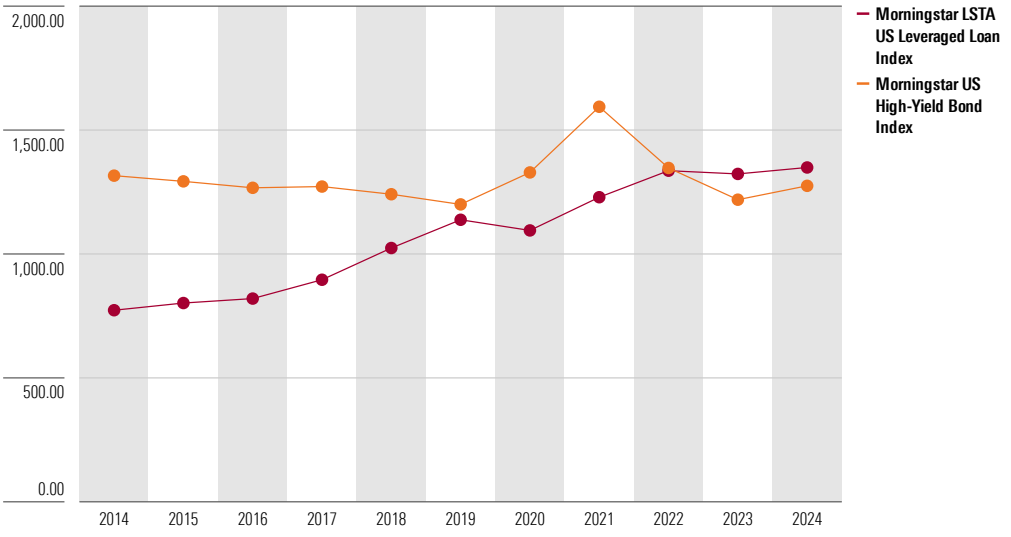
Key Takeaways

- Leveraged loans and high-yield bonds both provided higher yields compared with Treasuries and investment-grade bonds. However, the elevated yields were accompanied by increased risk, stemming from the higher credit risk associated with the underlying loans or bonds.
- While leveraged loans and high-yield bonds both provide exposure to non-investment-grade instruments, a key distinction between the two asset classes is in their coupon payment structure: Leveraged loans are primarily floating in nature; high-yield bonds typically have fixed coupons.
- The elevated yield premiums and reduced interest-rate sensitivity of leveraged loans, relative to high-yield bonds, have historically contributed to their potential for delivering superior risk-adjusted returns.
- Utilizing Markowitz's efficient portfolio theory, leveraged loans showed a more favorable and efficient frontier than high-yield bonds. This indicates that leveraged loans enabled investors to construct portfolios with superior risk-adjusted returns as compared with high-yield bonds.
- Across all market regimes analyzed in this research paper, leveraged loan returns had lower correlations to equity returns than that of high-yield bonds.
- Leveraged loans outperformed high-yield bonds during rate-hike cycles. The much lower duration of leveraged loans owing to their floating-coupon payment structure protected the asset class from adverse impact because of rate hikes.
- High-yield bonds outperformed leveraged loans during rate-cut cycles because of their greater sensitivity to interest-rate movements, allowing them to benefit more significantly from declining interest rates.

Beyond Treasuries: Exploring a Decade-Long Evolution of Leveraged Loans and High-Yield Bonds

Leveraged loans experienced a notable upward trajectory over the decade, showing sustained growth with a level of stability in recent years. Conversely, high-yield bonds maintained a relatively stable market value for most of the period but have been on a downward trend since 2021. Exhibit 1 plots the market value of US high-yield bonds and US leveraged loans represented by the Morningstar US High-Yield Bond Index and the Morningstar LSTA US Leveraged Loan Index, respectively. "The Morningstar LSTA US Leveraged Loan Index Highlights a Growing Asset Class Popular With Credit Investors,"[1] published in June 2024, highlights the growing market for leveraged loans and its growing popularity among credit investors.

Exhibit 1 Average Market Value in USD billion

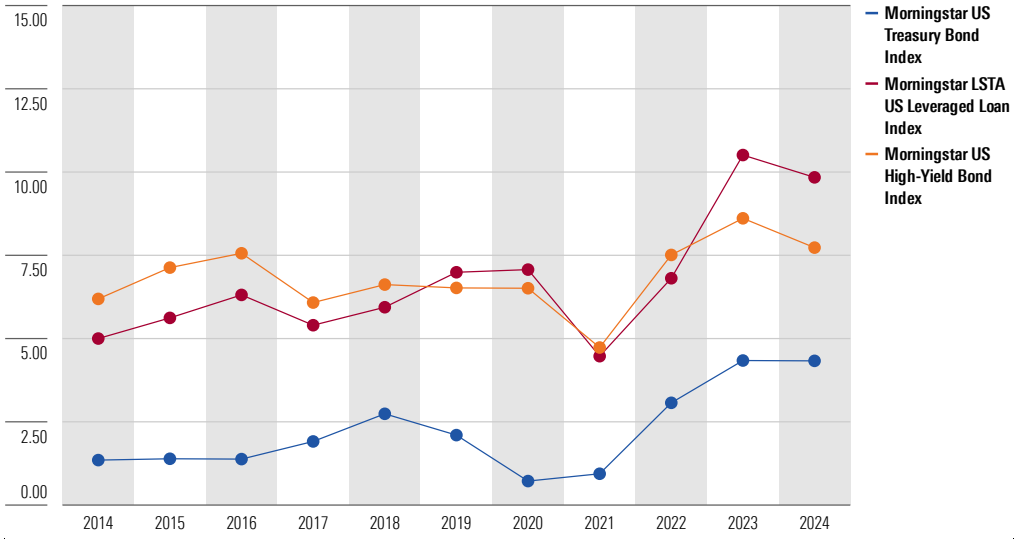


Source: Morningstar. Data as of Dec. 31, 2024.

High-yield bonds and a majority of leveraged loans carry credit ratings below investment-grade. The risk of investing in lower credit rating issuances is compensated by higher yields. This higher yield attracts investors aiming to improve the return of their portfolios. Exhibit 2 displays a yield comparison between leveraged loans, high-yield bonds, and US Treasury bonds. It can be seen that over the past decade, leveraged loans and high-yield bonds provided investors with an additional yield of approximately 400 basis points as compared with the US Treasury bonds.

1 Lefkovitz, Dan, Binns, Katie, and Templeton, Elizabeth "The Morningstar LSTA US Leveraged Loan Index Highlights a Growing Asset Class Popular With Credit Investors," Morningstar, June 5, 2024.

Exhibit 2 Average Yields (%)



Source: Morningstar. Data as of Dec. 31, 2024.

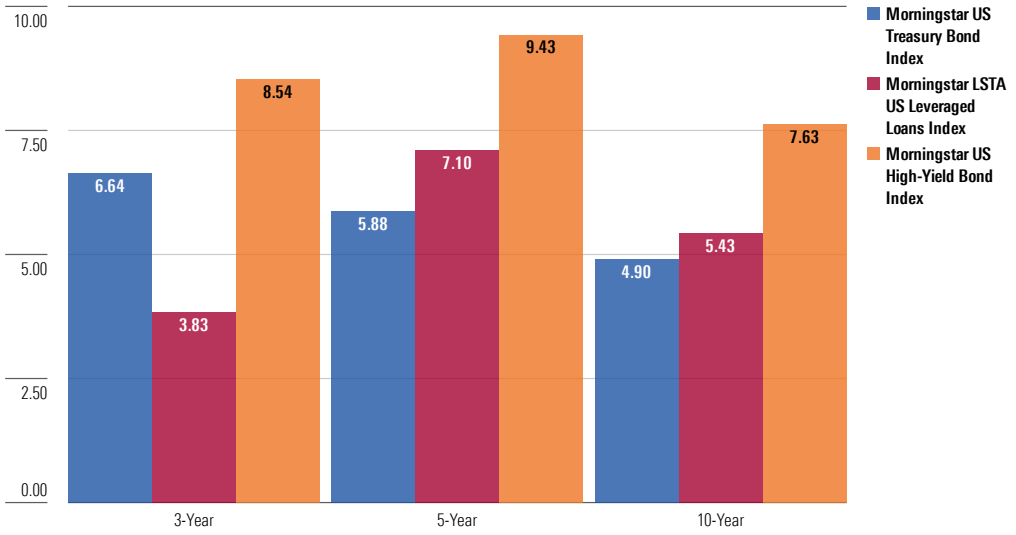
The higher yields are accompanied by increased risk, arising from the lower credit ratings of the underlying bonds or loans. Exhibit 3 displays a comparison of risk, measured as the standard deviation of returns, between leveraged loans, high-yield bonds, and US Treasuries represented by the Morningstar LSTA US Leveraged Loan Index, Morningstar US High-Yield Bond Index, and Morningstar US Treasury Bond Index, respectively.[2]

Over the last three years, leveraged loans exhibited less volatility compared with Treasuries. This is primarily owing to the drastic increase in yields following the Federal Reserve's rate hikes that began in March 2022, which caused significant volatility in fixed-rate instruments. Leveraged loans characterized by floating-rate coupon payments were less affected by the yield movements during this period and hence experienced lower volatility. Over longer time periods, Treasuries exhibited lower risk, followed by leveraged loans and high-yield bonds.

It is therefore important to analyze the risk-return characteristics of leveraged loans and high-yield bonds to understand the implications on the overall portfolio characteristics.

2 The TR USD variants of Morningstar LSTA US Leveraged Loan Index, Morningstar US High-Yield Bond Index, and Morningstar US Treasury Bond Index are used for analysis.

Exhibit 3 Standard Deviation of Returns (%)



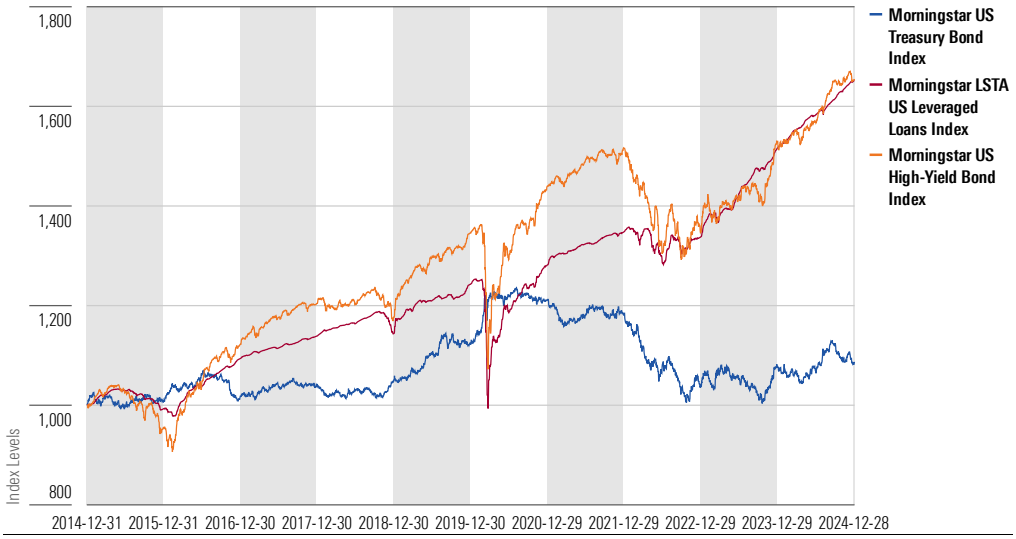
Source: Morningstar. Data as of Dec. 31, 2024.

Historical Risk-Return Characteristics

Exhibit 4 displays the historical performance of the Morningstar US Treasury Bond Index, Morningstar LSTA US Leveraged Loans Index, and Morningstar US High-Yield Index, while Exhibit 5 highlights the comparative risk profile of these indexes.

Over the last decade, leveraged loans and high-yield bonds offered similar annualized returns. However, high-yield bonds demonstrated significantly higher risk, resulting in a superior Sharpe ratio for leveraged loans.

Exhibit 4 Performance Charts



Source: Morningstar. Data as of Dec. 31, 2024.

Exhibit 5 Historical 10-Year Performance Summary

Parameters	Morningstar US Treasury Bond Index	Morningstar LSTA US Leveraged Loan Index	Morningstar US High-Yield Bond Index
Start Date	2014-12-31	2014-12-31	2014-12-31
End Date	2024-12-31	2024-12-31	2024-12-31
Return (%)	0.83	5.15	5.17
Risk (%)	4.90	5.43	7.63
Return/Risk	0.17	0.95	0.68
Sharpe-Ratio	-0.19	0.62	0.45
Max Drawdown (%)	-18.78	-20.73	-21.30

Source: Morningstar. Data as of Dec. 31, 2024.

Exhibit 6 displays the yearly performance of leveraged loans and high-yield bonds since 2008. Leveraged loans outperformed high-yield bonds in terms of risk-return characteristics for all years, except in three instances—2008, 2011, and 2020.

Exhibit 6 Yearwise Performance Comparison

Index	Morningstar LSTA US Leveraged Loan Index			Morningstar US High-Yield Bond Index		
Year	Returns (%)	Risk (%)	Return/Risk	Returns (%)	Risk (%)	Return/Risk
2008	-29.10%	6.97%	-4.17	-24.71%	10.35%	-2.39
2009	51.62%	4.52%	11.43	54.67%	6.73%	8.12
2010	10.13%	1.63%	6.20	14.57%	3.50%	4.16
2011	1.52%	2.93%	0.52	5.30%	4.75%	1.12
2012	9.66%	1.03%	9.35	15.30%	5.23%	2.92
2013	5.29%	0.61%	8.66	7.21%	14.45%	0.50
2014	1.60%	1.31%	1.22	2.38%	3.46%	0.69
2015	-0.69%	1.00%	-0.69	-4.44%	4.03%	-1.10
2016	10.16%	1.16%	8.77	17.46%	5.30%	3.29
2017	4.12%	0.41%	10.16	7.30%	2.07%	3.53
2018	0.44%	1.00%	0.44	-2.27%	2.98%	-0.76
2019	8.64%	1.55%	5.59	14.33%	2.81%	5.11
2020	3.12%	9.56%	0.33	7.03%	11.29%	0.62
2021	5.20%	0.61%	8.54	5.24%	2.16%	2.42
2022	-0.77%	2.82%	-0.27	-11.09%	7.45%	-1.49
2023	13.32%	1.51%	8.80	13.50%	5.16%	2.62
2024	8.95%	0.79%	11.29	8.19%	2.80%	2.93

Source: Morningstar. Data as of Dec. 31, 2024.

Understanding Portfolio Stability Through Diversification Analysis

To better understand the implication of risk/return characteristics on portfolio diversification, an efficient frontier analysis can be employed.

Two multi-asset portfolios are constructed for this analysis:

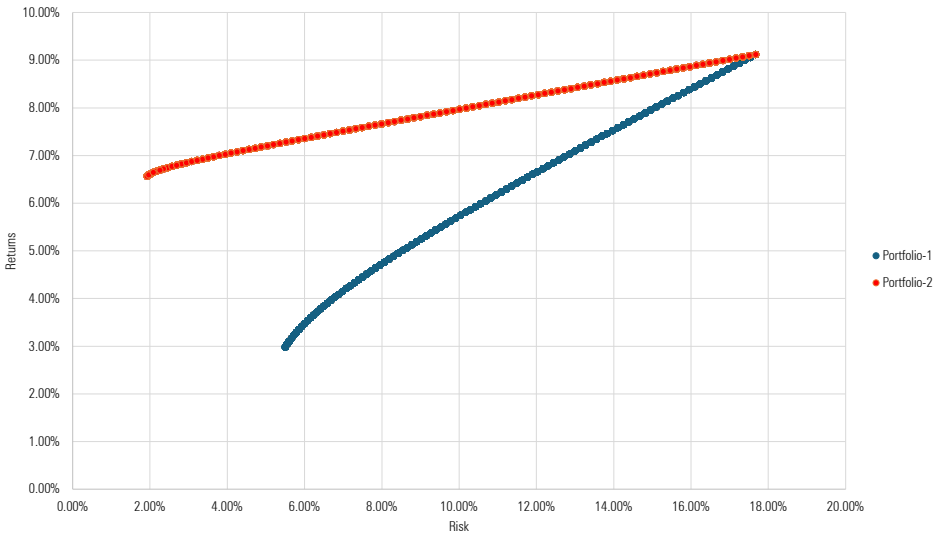
- Portfolio 1: US equity and US high-yield bonds (represented by the Morningstar US Market Index and Morningstar US High-Yield Bond Index)
- Portfolio 2: US equity and US leveraged loans (represented by the Morningstar US Market Index and Morningstar LSTA US Leveraged Loan Index)

Using Markowitz's portfolio theory, an efficient frontier was created for Portfolio 1 and Portfolio 2 for three-, five-, and 10-year time periods.

Exhibits 7 through 9 illustrate that the Portfolio 2 frontier, which included leveraged loans, consistently lay above the Portfolio 1 frontier, which included high-yield bonds, demonstrating the enhanced diversification benefits of holding leveraged loans over high-yield bonds. This implies that for any specific return target over this historical period, an investor constructing a portfolio with leveraged loans would have experienced lower volatility than a portfolio with high-yield bonds. The October 2023

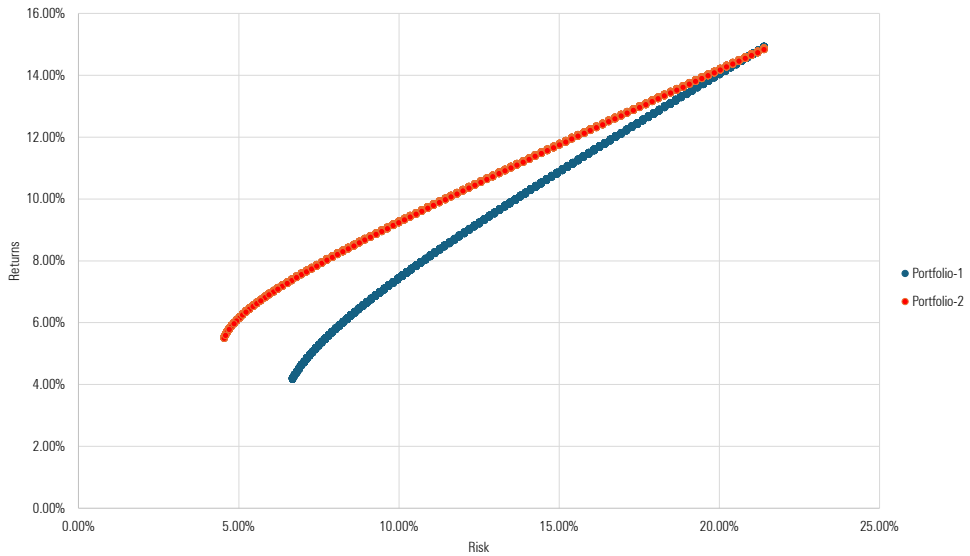
publication, "Sharpening Fixed-Income Portfolio Allocations"[3] underscores the significant role of leveraged loans in optimizing the Sharpe ratios, by allocating 30% weight to the Morningstar LSTA US Leveraged Loan Index in their Sharpe-optimal, unconstrained portfolio. This insight further highlights the diversification advantages offered by this asset class.

Exhibit 7 Three-Year Horizon Efficient Frontier



Source: Morningstar. Data as of Dec. 31 ,2024.

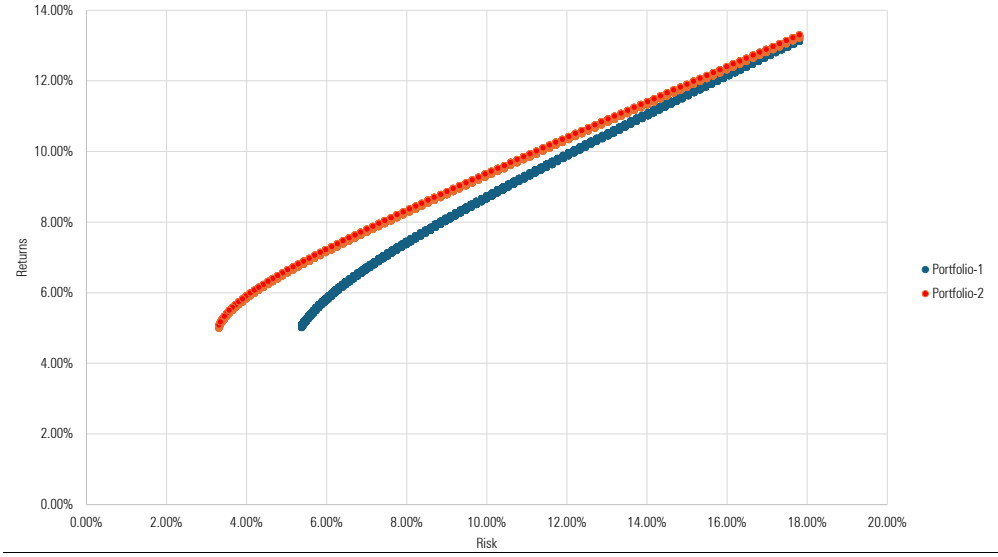
Exhibit 8 Five-Year Horizon Efficient Frontier



Source: Morningstar. Data as of Dec. 31, 2024.

3 Kowara, Maciej and Lucas, Alec. "Sharpening Fixed Income Portfolio Allocations." Morningstar. Oct. 31, 2023.

Exhibit 9 10-Year Horizon Efficient Frontier



Source: Morningstar. Data as of Dec. 31, 2024.

Regime Analysis

The following analysis compares the performance of leveraged loans with high-yield bonds in various market regimes.[4]

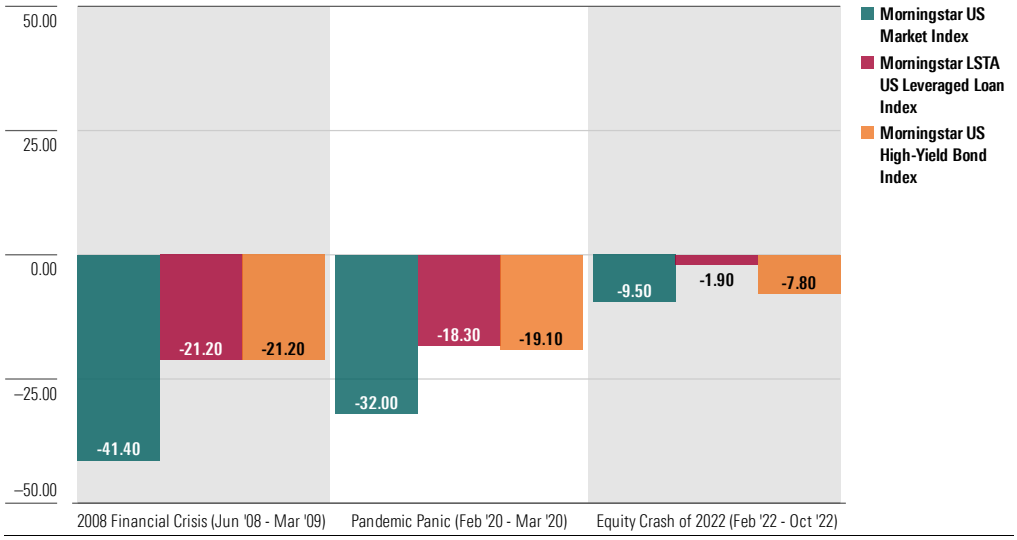
Leveraged Loans Providing Superior Diversification During Equity Downturns

Exhibits 10 and 11 analyze market regimes where significant negative returns occurred in US equity markets. We explored three market environments—the 2008 global financial crisis, pandemic panic of 2020, and the market crash of 2022 on account of rising inflationary fears and the onset of the Russia-Ukraine war.

Exhibit 10 shows that leveraged loans experienced losses at par or lesser than high-yield bonds. Exhibit 11 further indicates that leveraged loans maintained lower correlations with US equity markets compared with high-yield bonds. This demonstrates that leveraged loans provided superior diversification benefits in equity downturns.

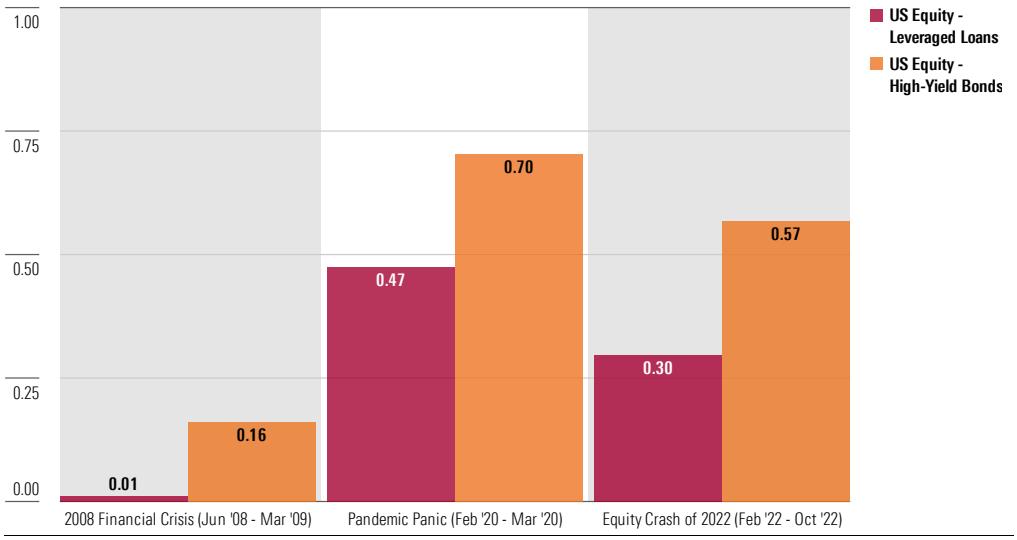
4 The TR USD variants for the Morningstar LSTA US Leveraged Loan Index, Morningstar US High-Yield Bond Index, Morningstar US Treasury Bond Index, and Morningstar US Market Index are used for regime analysis.
US equity is represented by the Morningstar US Market Index; US Treasury is represented by the Morningstar US Treasury Bond Index; leveraged loan is represented by the Morningstar LSTA US Leveraged Loan Index; and high-yield bond is represented by the Morningstar US High-Yield Bond Index.

Exhibit 10 Returns (%)



Source: Morningstar. Data as of Dec. 31, 2024.

Exhibit 11 Correlations



Source: Morningstar. Data as of Dec. 31, 2024.

Leverage Loans Underperform High-Yield Bonds in Last Two Rate-Cut Cycles

Exhibits 12 and 13 explore market environments where significant rate cuts were implemented by the Federal Reserve.

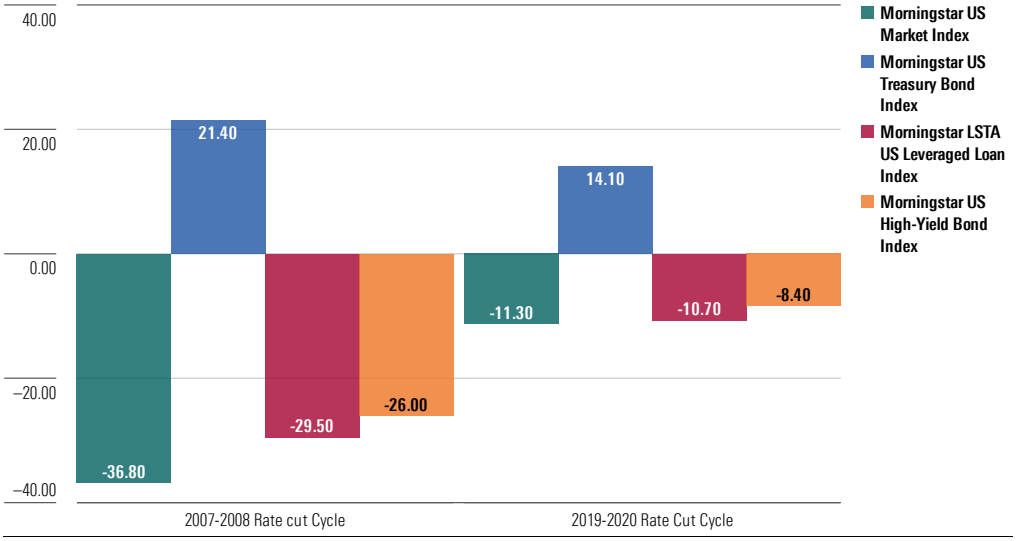
Two major rate-cut cycles were analyzed—rate cuts implemented by the Federal Reserve in 2007-08[5] in response to the onset of the global financial crisis and the rate cuts implemented in 2019-20[6] response to the economic slowdown and concerns around the covid pandemic.

Exhibit 12 illustrates that during the two rate-cut cycles—periods also marked by substantial equity losses—both leveraged loans and high-yield bonds faced significant losses, with leveraged loans underperforming high-yield bonds by approximately 200 basis points. Driven by the inverse relationship between bond prices and yields, US Treasuries achieved strong positive returns as investors shifted to safer assets.

Exhibit 13 shows that leveraged loans maintained considerably lower correlations with US equities relative to high-yield bonds during these periods.

Thus, while leveraged loans provide stronger diversification benefits during equity downturns, high-yield bonds have historically outperformed them in rate-cut cycles owing to their fixed-coupon structure and higher duration, making them more responsive to falling interest rates.

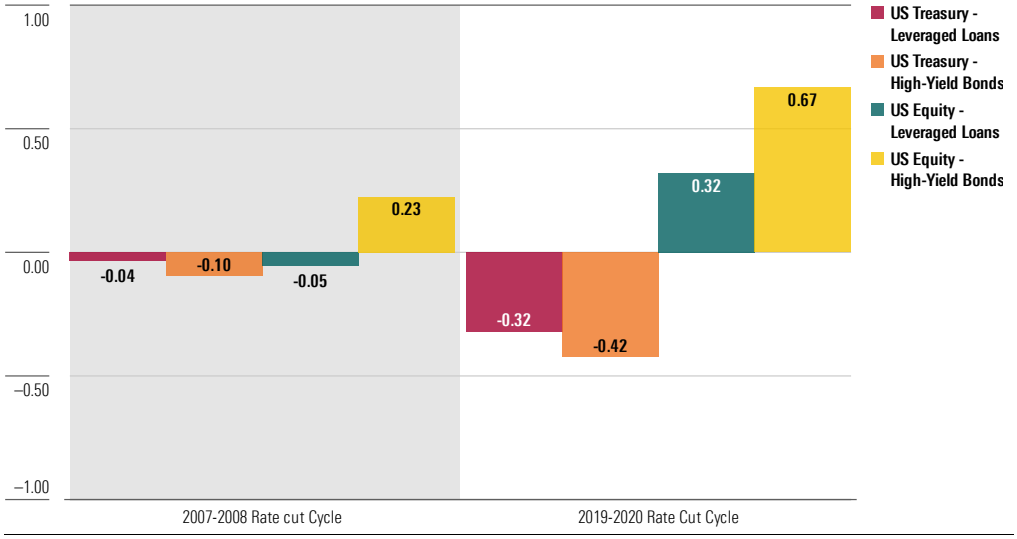
Exhibit 12 Returns (%)



Source: Morningstar. Data as of Dec. 31, 2024.

5 Period between May 2007 and December 2008 is considered for the 2007-08 rate-cut cycle.
6 Period between May 2019 and March 2020 is considered for the 2019-20 rate-cut cycle.

Exhibit 13 Correlations



Source: Morningstar. Data as of Dec. 31, 2024.

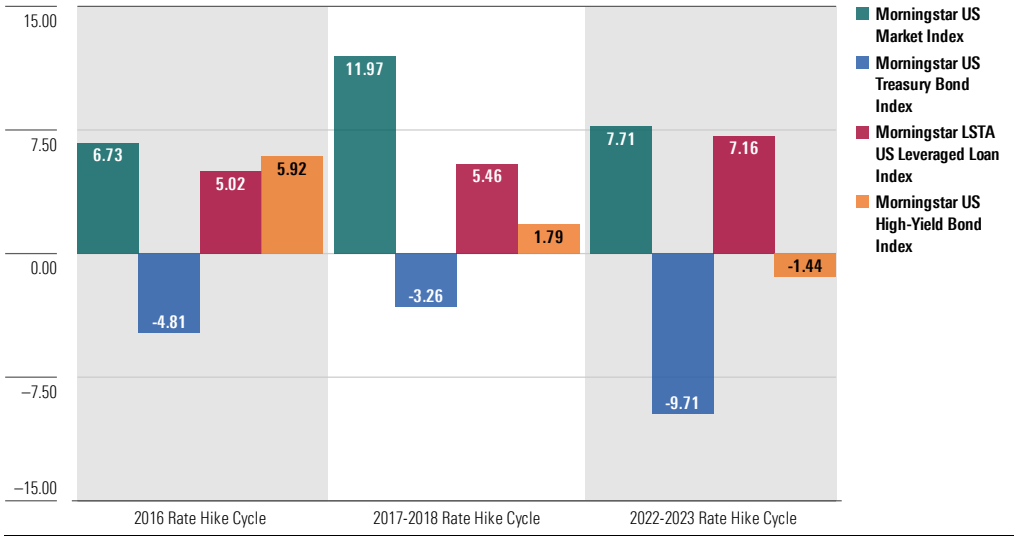
Leveraged Loans Outperform High-Yield Bonds in Two of Past Three Rate-Hike Cycles

This section analyzes market regimes where significant rate hikes were implemented by the Federal Reserve.

Three rate-hike cycles were studied—rate hikes in 2016[7] and 2017-18[8] in response to strong labor and economy growth data and rate hikes in 2022-23[9] in response to rising inflation. Exhibit 14 shows that leveraged loans significantly outperformed high-yield bonds in two of the three rate-hike cycles. Since leveraged loans had floating-coupon payments, they exhibited much lower duration/interest-rate sensitivity and were less affected by an increase in interest rates. On the other hand, high-yield bonds, owing to their fixed-coupon payments structure, had higher duration and hence were more sensitive to interest-rate movements. While leveraged loans slightly underperformed during the 2016 rate-hike cycle, Exhibit 15 shows that leveraged loans exhibited lower correlations to both US Treasury and US equity than high-yield bonds, thereby providing investors with better portfolio diversification.

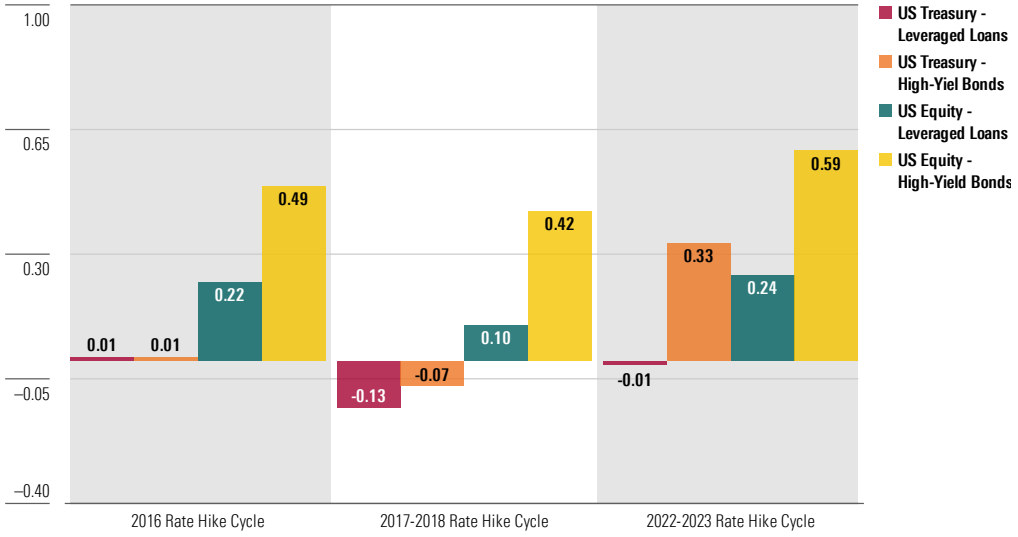
7 Period between July 2016 and December 2016 is considered for the 2016 rate-hike cycle.
8 Period between September 2017 and October 2018 is considered for the 2017-18 rate-hike cycle.
9 Period between March 2022 and July 2023 is considered for the 2022-23 rate-hike cycle.

Exhibit 14 Returns (%)



Source: Morningstar. Data as of Dec. 31, 2024.

Exhibit 15 Correlations



Source: Morningstar. Data as of Dec. 31, 2024.

Conclusion

Leveraged loans and high-yield bonds have traditionally offered investors superior returns compared with US Treasury bonds, albeit with greater credit risk and increased volatility. The lure of lucrative yield imposes a choice on the investor—whether to allocate funds to high-yield bonds or leveraged loans. The research presented in this paper demonstrates that leveraged loans provided better diversification to an investor with exposure to US equities by exhibiting much lower correlations to US equities over the last decade. However, it would be remiss to overlook the benefits of holding high-yield bonds in the portfolio. High-yield bonds can provide outperformance compared with leveraged loans during rate-cut cycles, while leveraged loans provide a hedge against rising interest rates.

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