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The Case for Blending High Yield Bonds and Senior Loans Together

By Matthew Bartolini, CFA, CAIA, Head of SPDR Americas Research

Bartlomiej Szczurek, CFA, ETF Research Analyst

Ronnie Kuriakose ETF Research Strategist

Evolving bond portfolios to meet investors' long-term objectives requires seeking new sources of returns not found in traditional core aggregate fixed income. High yield bonds and senior loans are two credit sectors that could help investors meet their income goals.

When held as a long-term strategic allocation next to a diversified core, high yield bonds and senior loans offer potential for enhanced income generation and improved risk-adjusted return.

While there could be benefits to using each as a standalone allocation, our historical efficient frontier analysis across varying investor types confirms blending *both* high yield bonds and senior loans has historically been more beneficial to traditionally diversified portfolios.

Creating a More Efficient Frontier

An efficient frontier graphically represents portfolios that seek to maximize returns for the risk assumed. Returns and risk metrics are derived from a portfolios investments, the underlying assets co-movement, and their weights in the portfolio.

If a new asset is added to a portfolio and it shifts the curve higher, the new portfolio can be viewed as more optimal than the original as it provides more return for the same level of risk. Efficient frontier curves help illustrate the potential impact on risk and return based on different portfolio combinations, in this case, the potential impact of adding two high income bond sectors — high yield and senior loans — to a core bond allocation within a broader 60/40 portfolio.

In this analysis, high yield US corporate bonds are represented by the ICE BofA US High Yield Index, senior loans by the Morningstar LSTA US Leveraged Loan Index, a core bond position by the Bloomberg US Aggregate Bond Index (Agg), and an equity allocation by the MSCI ACWI IMI Index. Monthly returns were analyzed from 1998 to form return, risk, and covariance data needed to compile the efficient frontier.

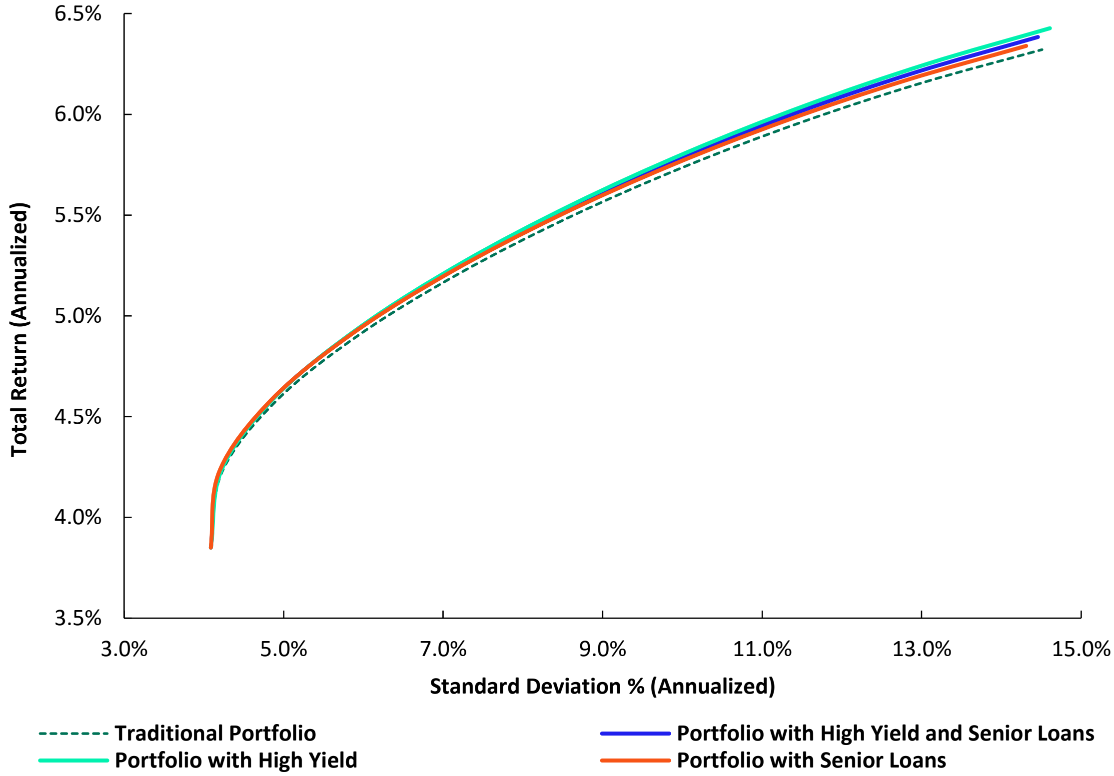
For the weighting, and where to source the allocation from, intuitive adjustments had to be made based on historical sensitivity relationships. Both high yield US corporate bonds and senior loans are below-investment grade market segments and carry noticeably higher credit risk than Agg-based core investment grade bonds.

With a higher amount of credit risk, the two sectors also have greater equity sensitivity than Agg-sectors (e.g., US Treasurys). High yield has a 0.43 beta to the MSCI ACWI IMI Index, while senior loans have a 0.22 beta since 1998, compared to the Agg's 0.04 beta and US Treasurys' -0.04 beta to equity markets.[1]

With that profile, sourcing either a high yield or senior loan allocation from just core bonds may introduce an unintended equity bias. To mitigate this risk within the broader 60/40 portfolio, the weights of the high income exposures were sourced from both bond (two-thirds) and global stock (one-third) allocations. Weights were adjusted by 0.50% at each iteration, resulting in more than 80 portfolio blends for analysis of risk and return patterns.

In plotting efficient frontier curves, allocations with non-traditional bond sectors incorporated have curves above the traditional 60/40 (Figure 1). This illustrates an improved risk and return profile when those sectors are included in a traditional portfolio, either as a standalone sleeve or in a blended allocation with varying weights.

Figure1: The More Optimal Portfolio Includes High Income Credit Sectors



Source: Bloomberg Finance L.P., Morningstar, Period: December 1, 1998 – December 31, 2023. Diversification does not ensure a profit or guarantee against loss. Traditional Portfolio = blend of MSCI ACWI IMI Index and Bloomberg US Aggregate Index, High Yield = ICE BofA US High Yield Index, Senior Loans = Morningstar LSTA US Leveraged Loan Index. **Past performance is not a reliable indicator of future performance.**

Seeking a More Efficient Return per Unit of Risk

The efficient frontier illustrates risk and return for more than 80 potential portfolio combinations. But some are not practical allocations for investor profiles. To understand the more practical impacts of including a mix of high income allocations, returns and risk were examined across four typical investor profile allocations:

1. Aggressive: 80% equities, 20% core Agg bonds
2. Moderate: 60% equities, 40% core Agg bonds
3. Moderate Conservative: 40% equites, 60% core Agg bonds
4. Conservative: 20% equities, 80% core Agg bonds

The assumed allocation to either high yield, loans, or the combination of high yield and loans across the four portfolios is as follows:

1. Aggressive: 77.3% equities, 14.7% core Agg bonds, 8% high yield/loans/or both
2. Moderate: 58% equities, 36% core Agg bonds, 6% high yield/loans/or both
3. Moderate Conservative: 38.7% equities, 57.3% core Agg bonds, 4% high yield/loans/or both
4. Conservative: 19.3% equities, 78.7% core Agg bonds, 2% high yield/loans/or both

Of these 16 potential portfolio allocations, the inclusion of just high yield led to the highest historical returns. Yet, it also led to the highest volatility. Meanwhile, the senior loan only addition led to the lowest standard deviation of returns — even versus the original traditional portfolio given the lesser correlated nature of loans to both asset classes (56% to equities, 5% to bonds).[2] But the improvement to returns was minimal. (Figure 3)

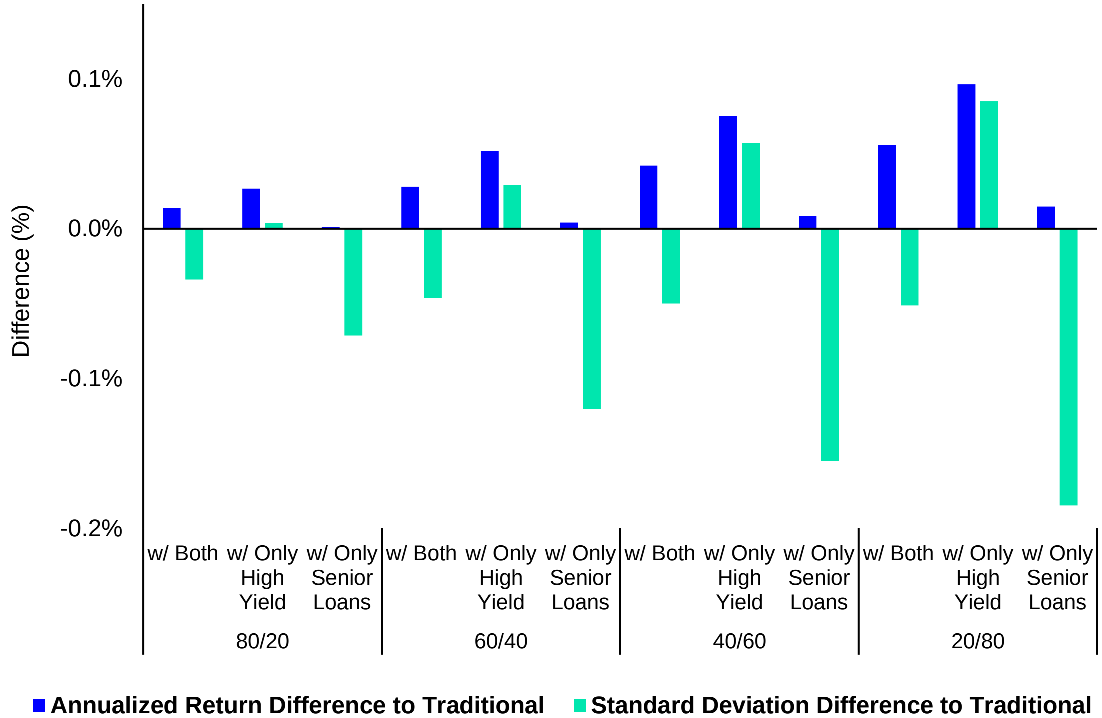
Figure 2: Risk and Return Characteristics

	Total Return (%, Annualized)	Standard Deviation (%, Annualized)
80/20 Allocation		
Traditional	4.58%	4.92%
w/ Both	4.60%	4.88%
w/ Only High Yield	4.61%	4.92%
w/ Senior Loans	4.58%	4.85%
60/40 Allocation		
Traditional	5.21%	7.21%
w/ Both	5.24%	7.17%
w/ Only High Yield	5.26%	7.24%
w/ Senior Loans	5.22%	7.09%
40/60 Allocation		
Traditional	5.74%	10.01%
w/ Both	5.78%	9.96%
w/ Only High Yield	5.81%	10.06%
w/ Senior Loans	5.75%	9.85%
20/80 Allocation		
Traditional	6.15%	12.99%
w/ Both	6.21%	12.93%
w/ Only High Yield	6.25%	13.07%
w/ Senior Loans	6.17%	12.80%

Source: Bloomberg Finance L.P., Morningstar, Period: December 1, 1998 – December 31, 2023. Diversification does not ensure a profit or guarantee against loss. Traditional Portfolio = blend of MSCI ACWI IMI Index and Bloomberg US Aggregate Index, High Yield = ICE BofA US High Yield Index, Senior Loans = Morningstar LSTA US Leveraged Loan Index. **Past performance is not a reliable indicator of future performance.**

With one of the high income sectors adding returns and the other decreasing risk, blending the two into one combination led to improved returns and less volatility relative to a traditional portfolio (Figure 3). In each of the four investor profile portfolios, the returns were increased (positive bar) and volatility was reduced (negative bar) when a combination of high yield and loans was added — a trend not present in any of the other examples.

Figure 3: Risk and Return Differences to a Traditional Portfolio



Source: Bloomberg Finance L.P., Morningstar, Period: December 1, 1998 – December 31, 2023. Diversification does not ensure a profit or guarantee against loss. Traditional Portfolio = blend of MSCI ACWI IMI Index and Bloomberg US Aggregate Index, High Yield = ICE BofA US High Yield Index, Senior Loans = Morningstar LSTA US Leveraged Loan Index. **Past performance is not a reliable indicator of future performance.**

Naturally, with the addition of a combined sleeve of high income sectors, there were also improvements in terms of potential income generation. And given the low duration of floating rate senior loans, the weighted duration of the total bond portfolio declined. This led to a higher yield-per-unit-of-duration across all four investor types, with an average increase of 21%.[3]

Lastly, and speaking to the correlation and beta sensitivity profile of both bond sectors, the inclusion of a combined high yield and senior loan allocation did not increase a portfolio's beta to either equities or bonds. In fact, it lowered the bonds' beta in all instances (Figure 4).

Figure 4: Beta and Correlation to Stocks and Bonds

Portfolio		**Beta to MSCI ACWI IMI Index**	**Beta to Bloomberg US Agg Bond Index**
80/20	Traditional	0.23	0.92
	w/ High Yield and Senior Loans	0.23	0.91
60/40	Traditional	0.42	0.84
	w/ High Yield and Senior Loans	0.42	0.82
40/60	Traditional	0.62	0.76
	w/ High Yield and Senior Loans	0.61	0.73
20/80	Traditional	0.81	0.68
	w/ High Yield and Senior Loans	0.80	0.64

Source: Bloomberg Finance L.P., Morningstar, Period: December 1, 1998 – December 31, 2023. Diversification does not ensure a profit or guarantee against loss. Traditional Portfolio = blend of MSCI ACWI IMI Index and Bloomberg US Aggregate Index, High Yield = ICE BofA US High Yield Index, Senior Loans = Morningstar LSTA US Leveraged Loan Index. **Past performance is not a reliable indicator of future performance.**

An Active Approach to High Yield and Senior Loans Offers Even Greater Potential

The historical risk and return data presented above indicates a strategic combination of high yield bonds and senior loans can be potentially additive to a traditional core portfolio. But given the inefficiencies in those two markets, an active approach at the individual credit sector level has the potential to add an additional layer of outperformance and risk management.

An actively managed strategic 50/50 blend of high yield and senior loans has the potential to seek higher returns and help control risk better than a static 50/50 indexed combination, due to:

1. Modest tilting between high yield and senior loans based on macroeconomic, technical, fundamental, and relative value factors
2. Security selection within the senior loan portfolio
3. Security selection within the high yield portfolio

Our analysis shows that an active high income sleeve blending high yield and senior loans alongside a diversified core may allow investors to better meet long-term objectives by potentially enhancing returns and income, with less total portfolio risk.

Footnotes

1 Bloomberg Finance, L.P., as of 12/31/2023 based on monthly return data from 12/1998 to 12/2023 for the ICE BofA US High Yield Index, the Morningstar LSTA US Leveraged Loan Index, the MSCI ACWI IMI Index, the Bloomberg US Aggregate Bond Index, and the Bloomberg US Treasury Index.
2 Bloomberg Finance, L.P., as of 12/31/2023 based on monthly return data from 12/1998 to 12/2023 for the Morningstar LSTA US. Leveraged Loan Index, the MSCI ACWI IMI Index, and the Bloomberg US Aggregate Bond Index.
3 Bloomberg Finance L.P. as of 12/31/2023 per SPDR Americas Research Calculations.

Definitions

Bloomberg US Aggreate Bond Index is a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate pass-throughs), ABS and CMBS (agency and non-agency)

The MSCI ACWI Investable Market Index (IMI) captures large, mid and small cap representation across 23 Developed Markets (DM)and 23 Emerging Markets (EM) countries.

The ICE BofA US High Yield Index is market capitalization weighted and is designed to measure the performance of U.S. dollar denominated below investment grade (commonly referred to as “junk”) corporate debt publicly issued in the U.S. domestic market.

The Morningstar LSTA U.S. Leveraged Loan Index is designed to reflect the largest facilities in the US leveraged loan market. It mirrors the market-weighted performance of the largest institutional leveraged loans based upon market weightings, spreads, and interest payments.

Senior Loans is a debt financing obligation issued to a company by a bank or similar financial institution and then repackaged and sold to investors.

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Unless otherwise noted, all data and statistical information were obtained from Bloomberg LP and SSGA as of December 31, 2023. Data in tables have been rounded to whole numbers, except for percentages, which have been rounded to the nearest tenth of a percent.

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