Specialists in Complete Capital Structure Analysis®

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Defensive Floating Rate Loans

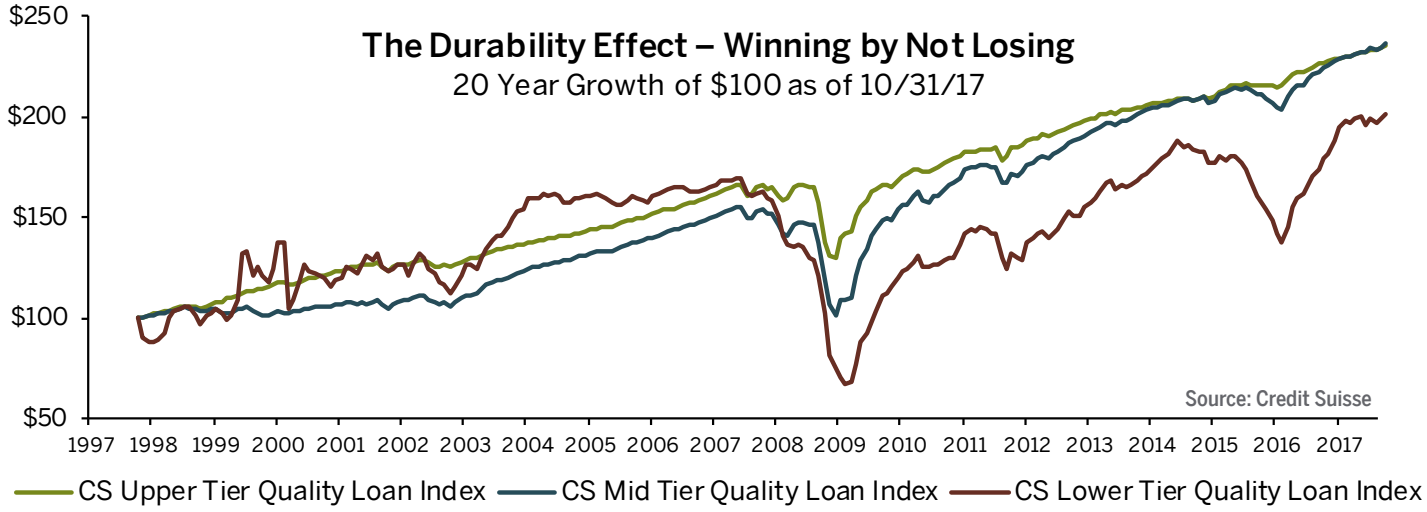
Capitalizing on Rising Rates While Protecting the Downside

Executive Summary

This paper examines the risk and return characteristics of Defensive Floating Rate Loans. Focusing on quality factors within an asset class naturally protected from duration risk has historically produced durable high income. A balance of credit and interest rate risk is key in today's environment of rising rates, issuance volume, duration risk, private market activity, and reduced covenant protection. For example, the BofA ML Investment Grade and Short Duration Investment Grade bond indices have only returned an annualized -2.9% and 2.1%, respectively, during rising rate months in the past 20 years. During that same time period, lower quality loans have experienced immense drawdowns during market events. In this paper, we will examine the importance of balancing these factors and how Defensive Loans can help optimize a portfolio's fixed income allocation.

Topics Addressed

- Characteristics, outperformance, and risk statistics
- Industry and asset class factors contributing to underutilization
- Credit and rising interest rate protection features
- Fit within a portfolio allocation and resulting effects



Note: Upper Tier: Split BBB and BB;
Middle Tier: Split BB, B and Split B;
Lower Tier: CCC/Split CCC and Default

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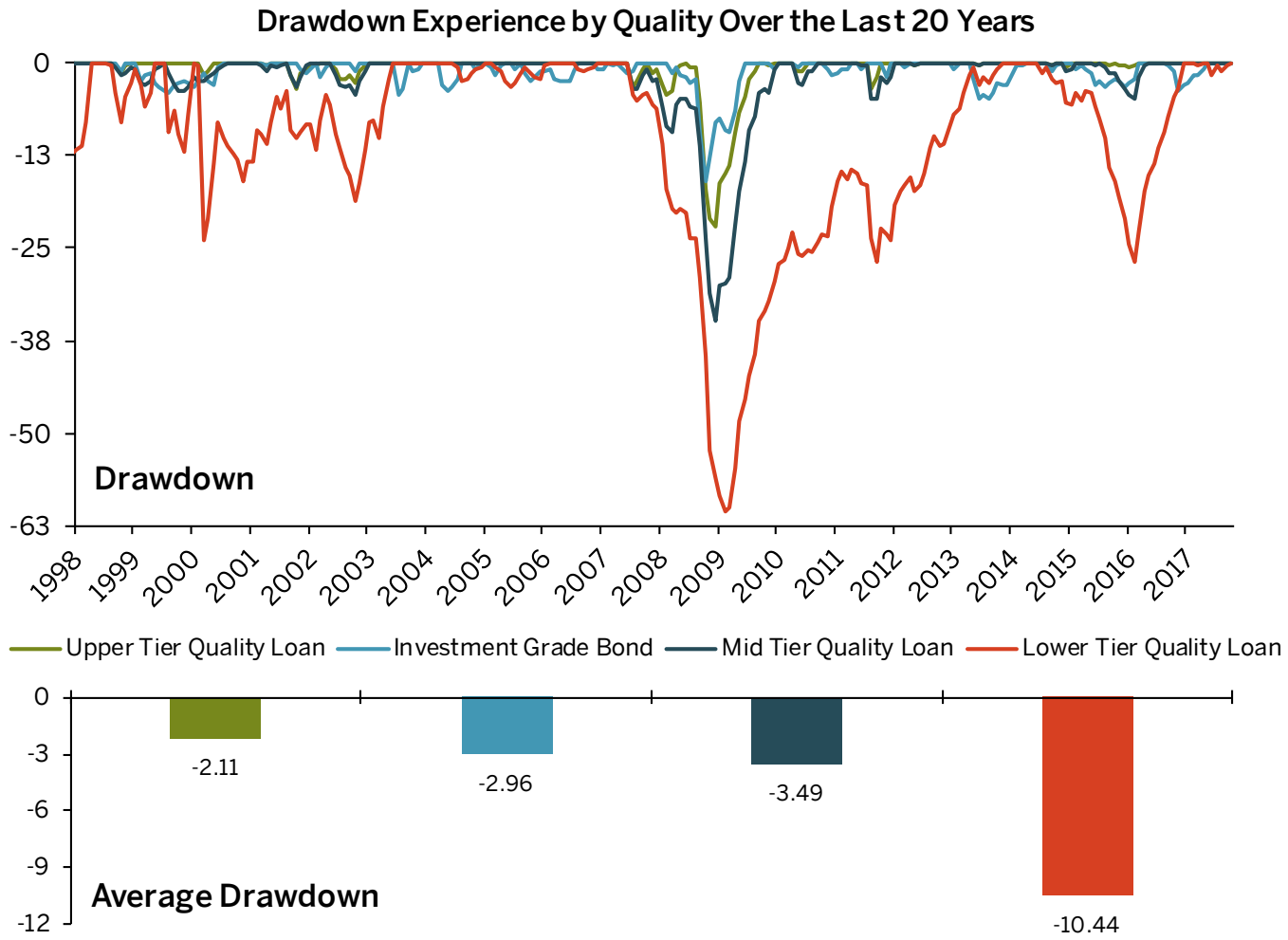
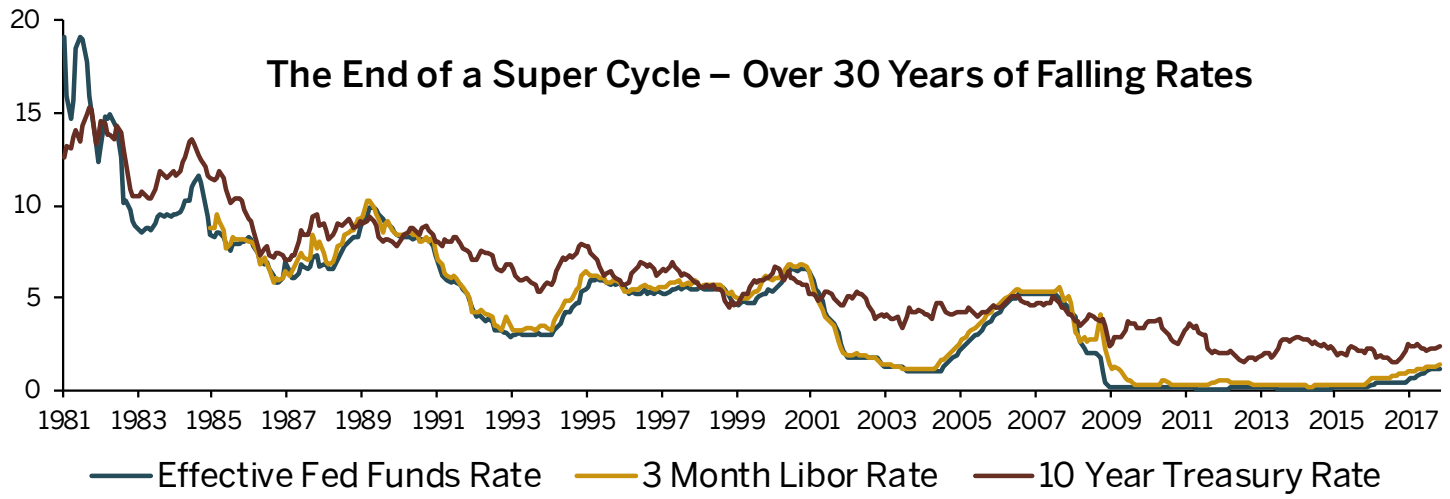
Defensive Loans and Protecting the Downside

Defensive Loans consist of non-distressed and well capitalized loans with lender protection in the form of debt seniority, covenants, and a strong balance sheet. They are generally liquid, BB-B rated, and have historically provided stable returns with protection from rising interest rates. The broad loan asset class has grown to roughly $1 trillion in outstanding par amid market demand for these durable features. So why then are managers increasingly allocating to CCC and below rated loans, which have historically seen three times the volatility? The answer may be that the prospect of higher returns in the short term appears to outweigh longer term risks. Hypothetically, this isn't a problem if the market is perfectly timed. However, when it's time to get out of distressed loans, there is no liquidity to do so. This can become evident during market events, when lower quality loans experience massive drawdowns, and can take years to recover, while higher quality loans have historically experienced drawdowns in line with investment grade bonds.



As of October 31, 2017. Source: Morningstar Direct, Credit Suisse Index Data. Indices: Invest Grade: BofA ML US IG Corp Master, BofA ML US 1-3 Year IG Corp, Loan: Credit Suisse Upper, Middle, Lower Tier Loan Indices. Tier Breakdown: Upper Tier: Split BBB's to BB (32.5% of market), Middle Tier: Split BB to Split B (58.5% of market), Lower Tier: CCC and below (9.0% of market)



Capitalizing on Rising Rates

The floating rate structure of Defensive Loans provides significant upside in rising rate environments, as coupon payments rise along side rates. This is in contrast to investment grade bonds with fixed coupons, where rising rates are a headwind and significant performance detractor. Per current asset flows, short duration investment grade bonds seem to be the market's preferred method for reducing this headwind – and are a leading Morningstar Category with YTD inflows of $55 billion. As shown in the below table, short duration investment grade bonds outperformed investment grade bonds during rising rate periods in the last 20 years (annualized returns of 2.1% vs -2.9%), but considerably lagged behind upper tier quality loan returns of 6.6%, which carried similar downside risk. That trait is easily overlooked considering we've only recently reached what is likely the bottom of a 36-year cycle of falling rates.

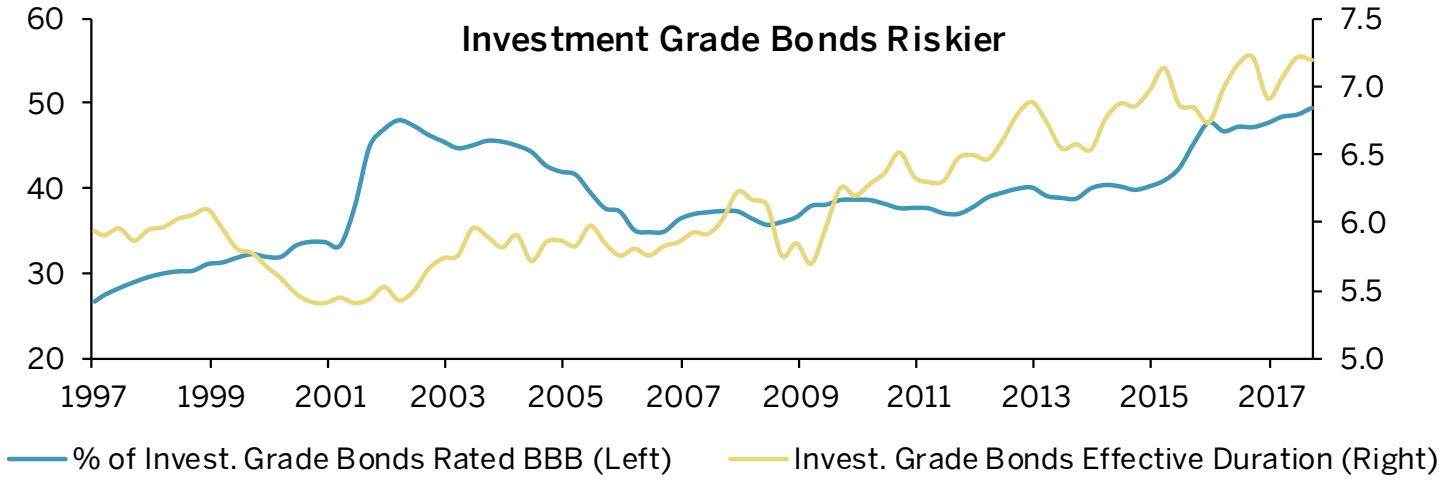
Risk and Return by Credit Quality – Historical Effect of Rising Rates

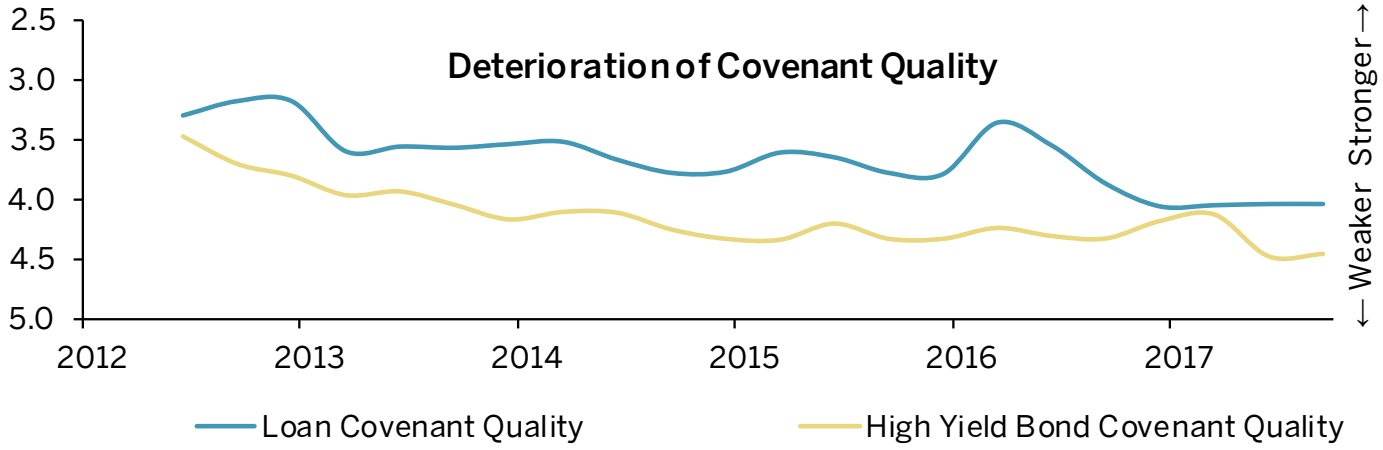
Asset Class	Last 20 Years					Rising Rate Months Only				
	Return	Event Risk (Omega)	Std Dev	Sharpe Ratio	Up Period Percent	Return	Event Risk (Omega)	Std Dev	Sharpe Ratio	Up Period Percent
Investment Grade Bonds	5.87	1.81	5.18	0.73	67.50	-2.87	0.57	5.32	-0.59	43.33
1-3Y Invest. Grade Bonds	4.27	2.51	2.30	0.95	80.00	2.13	2.05	2.70	0.66	68.33
Upper Tier Quality Loans	**4.37**	**1.83**	**4.60**	**0.51**	**84.17**	**6.60**	**3.94**	**5.54**	**1.12**	**88.33**
Middle Tier Quality Loans	**4.39**	**1.49**	**6.51**	**0.38**	**76.67**	**8.25**	**3.36**	**7.26**	**1.08**	**85.00**
Lower Tier Quality Loans	3.55	1.10	14.58	0.17	60.00	12.26	2.06	14.92	0.82	67.50
High Yield Bonds	6.80	1.57	9.05	0.54	68.75	9.09	2.24	9.89	0.90	67.50

As of October 31, 2017. Source: Morningstar Direct, Credit Suisse Index Data. Indices: High Yield: BofA ML US HY Master, Invest Grade: BofA ML US IG Corp Master, BofA ML US 1-3 Year IG Corp, Loan: Credit Suisse Upper, Middle, Lower Tier Loan Indices. Tier Breakdown: Upper Tier: Split BBB's to BB (32.5% of market), Middle Tier: Split BB to Split B (58.5% of market), Lower Tier: CCC and below (9.0% of market)

Proactively Optimize Credit Exposure in Current Environment

While the market appears healthy, investment grade bonds exhibit a historically high level of near-speculative ratings and interest rate risk. At the same time, high yield bond and loan covenant quality has seen significant deterioration. There has also been a notable rise in loan-only company capital structures, which translates to lower default recovery rates amid reduced collateral. Despite these factors, willingness to hold larger positions of lower quality loans remains high among managers. By market value, $54.7 billion of CCC and below loans represent 5.9% of the S&P/LSTA Leveraged Loan Index. The top 10 loan mutual funds by AUM hold average allocations of 10.4%. Despite the downside risk, this makes sense as a 500+ holdings portfolio is less able to benefit from loan selection opportunities to enhance returns, and must rely on macro exposure to higher yielding names to move the needle. None of these funds, however, were able to outperform the broad loan index on a 10-year basis. Given the allure of enhanced yield, only a handful of managers focus on Defensive Loans.





As of October 31, 2017. Source: Bloomberg, Moody's. Indices: BofA ML US IG Corp Master, Moody's Loan and High Yield Bond Covenant Quality Index

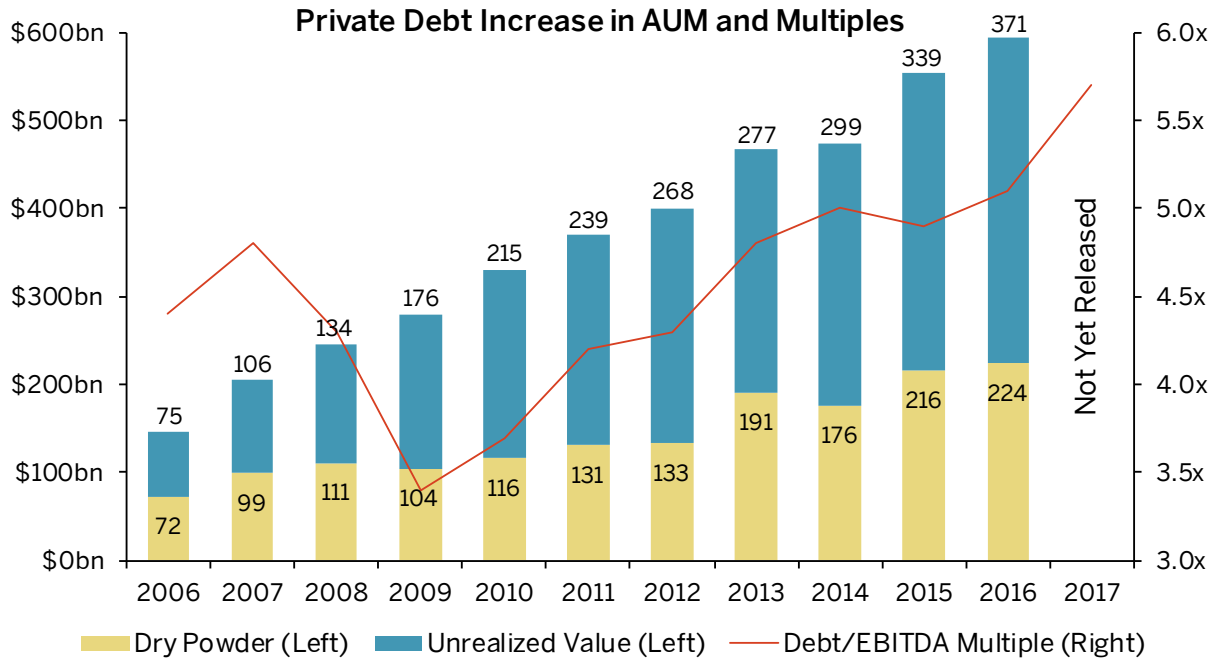
Complement to Direct Lending - Improve Credit Quality and Enhance Liquidity

Companies unable to acquire public loan funding often tap the now-thriving Middle Market. Direct loan strategies provide higher yields by lending to risker companies at higher rates with no secondary market. The asset class remains popular and has provided much needed yield in a high equity valuation and low interest rate environment. However, as potential risks accumulate, a level of reallocation to improve liquidity and credit quality may be prudent. As direct lending surged after the financial crisis amid tightening lending standards for banks, the asset class remains untested for periods of downturn except for the few funds that existed prior, which did not fair well.

Current private market risk factors include:

- The eroding of lending standards and increase in leverage amid rising demand and dry powder
- New and inexperienced funds relying on private equity firms for deals
- Mismatch of investment duration and lock-up periods
- Returns declining into the single digits

While public loan leverage multiples have remained steady at 5.0x since 2014, private loan multiples have risen to historic highs. This increase in credit risk is somewhat veiled by the smoothness of direct loan returns, derived from a lack of public market pricing. The loans are instead periodically priced by third-party firms employed by the fund holding the loans, presenting a potential conflict of interest. This pricing methodology does not reduce underlying default and pricing risks, which can be understated given the absence of rating agency or market scrutiny. As we've seen with publicly traded low quality loans, a degree of caution is warranted as a lack of liquidity can greatly enhance downside risk.



As of October 31, 2017. Source: Preqin

Summary and Conclusion

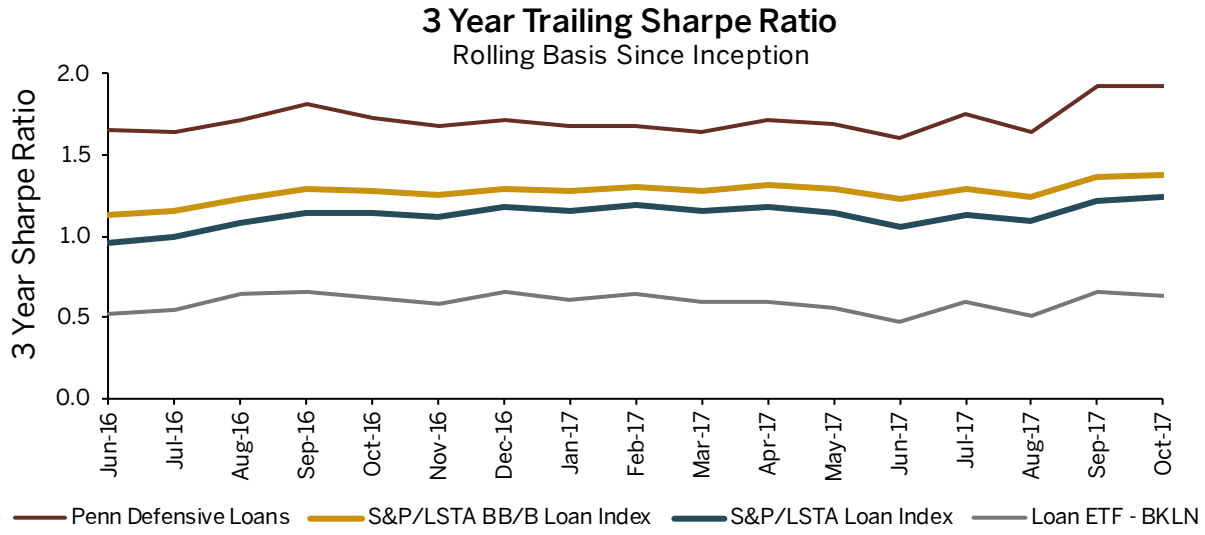
Defensive Loans have demonstrated suitability for a variety of functions. These include:

- Improving credit quality of high yield portfolios
- Enhancing liquidity of direct lending or distressed portfolios
- Shortening duration of investment grade portfolios
- Optimizing portfolio returns while protecting against uncertainty

Defensive Loan's durable returns and low correlations to investment grade, aggregate, and treasury bonds – 5 year 0.38, 0.15, and -0.05 correlations, respectively* – make it an ideal diversifier within an optimal portfolio. With outsized exposure to lower quality loans when massively scaled, and difficulty passively emulating a loan index, the asset class has historically realized its potential with focused, disciplined, and fundamentally driven active management.

The Penn Capital Defensive Loan Strategy

The Penn Capital Defensive Loan strategy has produced consistent Alpha and higher Sharpe Ratios vs the S&P/LSTA Loan and S&P/LSTA BB/B Loan Indexes since inception on a 3-year rolling basis. On a trailing basis, the strategy has outperformed YTD, 1 Year, 3 Year, and since inception with enhanced downside protection and upside participation.



As of October 31, 2017. Source: Morningstar Direct. *5 year correlations calculated monthly against the BofA ML US IG Corp Master, BBgBarc US Agg Bond, and BofA ML Treasury Master indices.

Firm Overview

Independently Owned, Investment-Driven Culture

- Founded in 1987; Headquartered in Philadelphia
- 62 total employees; 28 partners
- 24 member investment team

Specialists in Capital Structure Investing

- Fully integrated credit and equity investment team
- Fundamental, bottom-up proprietary research process
- Over 1,000 company management meetings per year

Investment Philosophy and Characteristics

- High Conviction – High Active Share
- Capacity Constraints – Liquidity Advantage and Style Integrity
- Client Focused – Partnership in Developing Custom Solutions

Key Facts

- Institutionally Focused
- Over $2 billion in Defensive Credit AUM across multiple duration ranges
- Investment Driven – 24 investment professionals and $3.9 billion in Total AUM*

Investment Vehicle Availability

- Institutional Mutual Funds
- Institutional Limited Partnership
- Institutional Separate Accounts

Specialists in capital structure investing

At Penn Capital, we believe that understanding a company's entire capital structure is the best way to identify investment opportunities with the most value. In fact, we've found that managing bond portfolios makes us better equity managers, and vice versa. Employing a fully integrated credit and equity research process, we focus on non-investment grade companies in the micro to mid-capitalization range, where we can take advantage of inefficient security pricing. We are an independent, employee-owned boutique investment management firm based in Philadelphia. We forge our own ideas, we respect hard work, and we are committed to our clients, our staff and our community.

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Sharpe ratio is the average return earned in excess of the risk-free rate per unit of volatility or total risk. Standard deviation is a measure of the dispersion of a set of data from its mean. Alpha gauges the performance of an investment against a market index or benchmark which is considered to represent the market's movement as a whole. The excess return of an investment relative to the return of a benchmark index is the investment's alpha. Downside capture can indicate how correlated a strategy is to a market, when the market declines. A drawdown is the peak-to-trough decline during a specific recorded period of an investment, fund or commodity.

* Total combined assets include model advisement, discretionary, and non-discretionary. As of March 31, 2018.