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Portfolio Optimization with Short Duration Credit

Short Duration BB-B Rated Corporate Bonds and Loans are an
Overlooked and Underutilized Source of Durable Alpha

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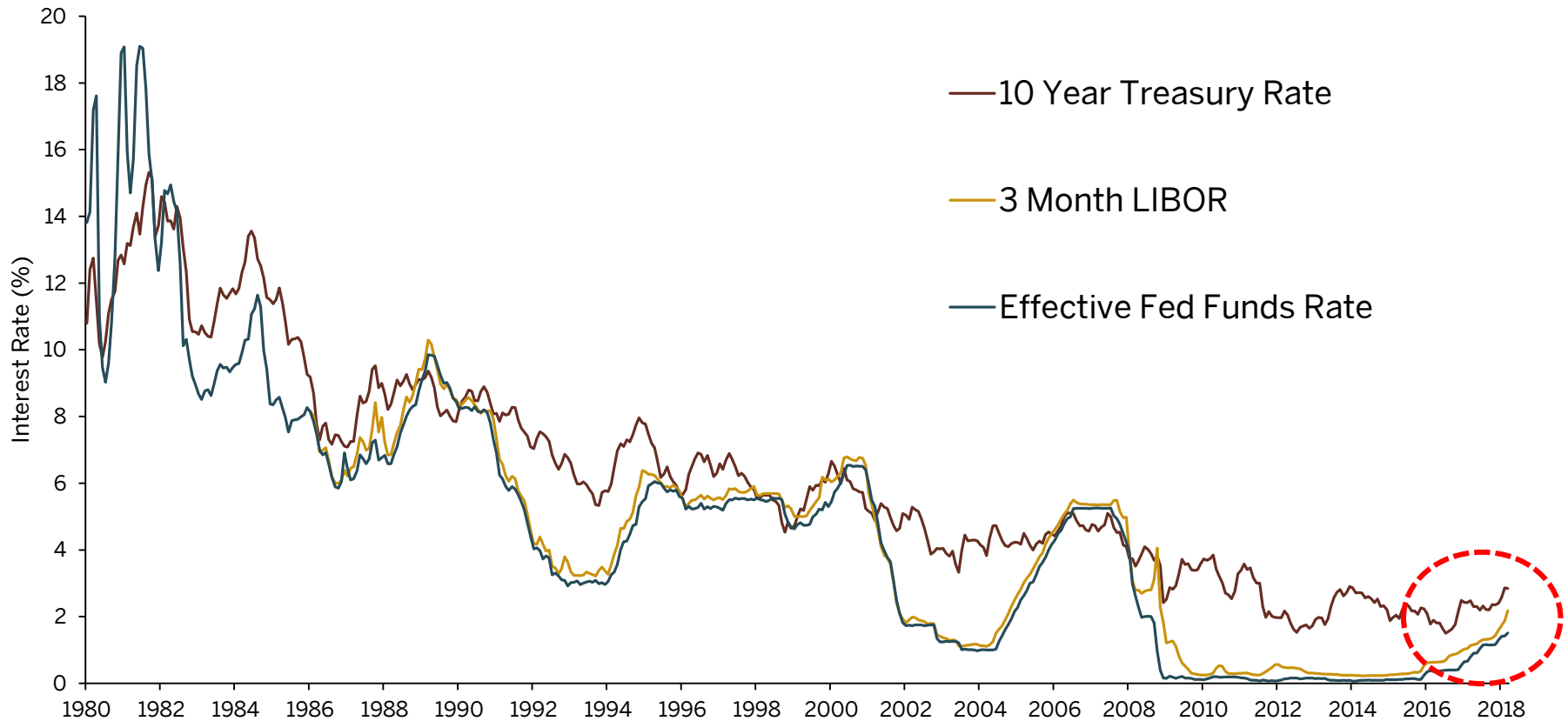
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Trends in Interest Rates

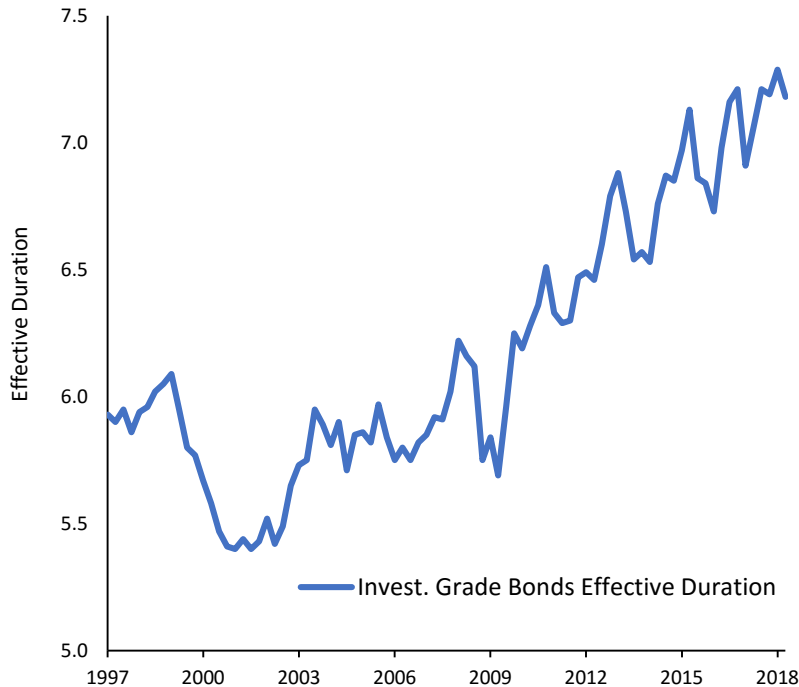
The End of a Super Cycle after 36 Years of Falling Rates



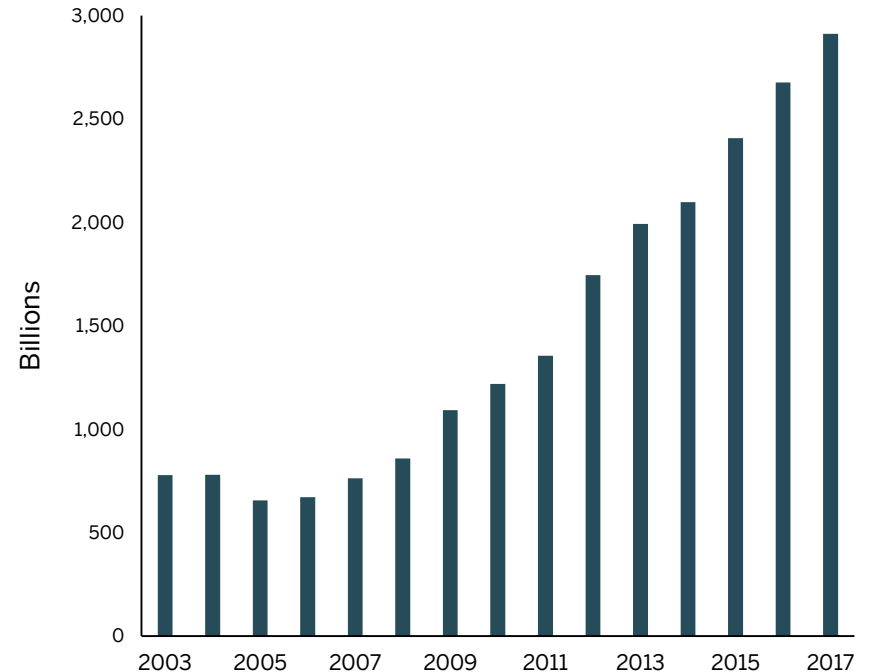
Elevated Risk in Investment Grade Fixed Income

An Investment Grade Rating Does Not Guarantee Absence of Risk

Investment Grade Duration at Historical Highs



Amount of BBB Rated Corporate Debt Outstanding at All-Time Highs



Duration and Interest Rate Sensitivity

Sensitivity to Changes in Interest Rates

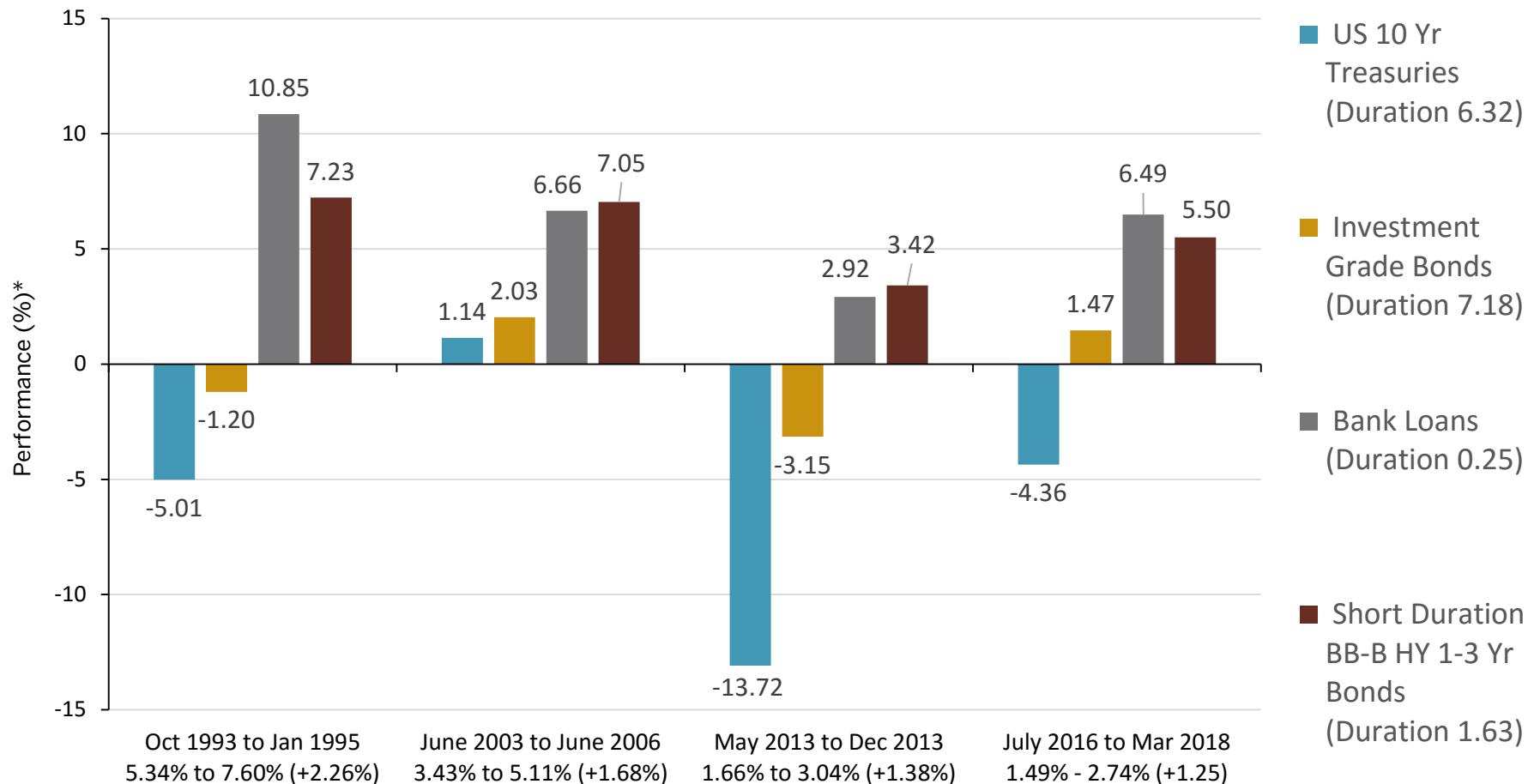
- Investment grade sectors with longer durations are more sensitive to changes in interest rates
- Corporate and high yield sectors tend to be more sensitive to improving credit and economic conditions which typically coincide with rising interest rates

Interest Rate Sensitivity
12 Month Holding Period Returns as of March 31, 2018

Yield Change (bps)	ICE BofA Merrill Lynch 10 yr. Treasury	Bloomberg Barclays US Aggregate	ICE BofA Merrill Lynch 1-3 yr Gov/Corp	ICE BofA Merrill Lynch US HY BB/B 1-3 yr.	ICE BofA Merrill Lynch US HY Constrained
-100	11.31	9.46	4.38	6.20	10.51
-50	7.03	6.29	3.44	5.40	8.43
-25	4.89	4.70	2.97	5.00	7.39
0	2.74	3.12	2.50	4.60	6.35
25	0.60	1.53	2.03	4.20	5.31
50	-1.54	-0.05	1.56	3.80	4.27
100	-5.83	-3.23	0.62	3.01	2.19
150	-10.11	-6.40	-0.32	2.21	0.11
200	-14.39	-9.57	-1.26	1.41	-1.98
Duration	8.57	6.34	1.88	1.59	4.16

Fixed Income Performance and Rising Interest Rates

Historical Performance of Select Fixed Income Indices During Periods of Rising Interest Rates



Historical Asset Class Performance

BB-B Short Duration Credit Characteristics

- BB-B rated corporate bonds maturing in 1-3 years account for approximately 10% of the high yield market
- Exhibits unique characteristics and portfolio effects which include low volatility and diversification
 - Durability stems from macro factor insensitivity, such as interest rate and high yield spread conditions
 - Lower volatility relative to investment grade, aggregate, and treasury indices

The Consistent Performance of BB-B Rated Short Duration Bonds

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	3Y	5Y	10Y
S&P 500 28.7	S&P 500 10.9	Loans 5.1	S&P 500 15.8	Agg 7.0	Agg 5.2	HY 57.5	HY 15.2	Agg 7.8	S&P 500 16.0	S&P 500 32.4	S&P 500 13.7	S&P 500 1.4	HY 17.5	S&P 500 21.8	Loans 1.4	S&P 500 10.8	S&P 500 13.3	S&P 500 9.5
HY 28.1	HY 10.9	S&P 500 4.9	HY 11.8	S&P 500 5.5	Corp IG -6.8	Loans 51.6	S&P 500 15.1	Corp IG 7.5	HY 15.6	HY 7.4	Corp IG 7.5	Agg 0.5	S&P 500 12.0	HY 7.5	BB-B 1-3 0.4	HY 5.2	HY 5.0	HY 8.1
BB-B 1-3 17.9	BB-B 1-3 6.5	BB-B 1-3 3.0	BB-B 1-3 10.5	Corp IG 4.6	BB-B 1-3 -14.3	BB-B 1-3 40.4	BB-B 1-3 12.0	HY 4.4	Corp IG 10.4	BB-B 1-3 6.1	Agg 6.0	BB-B 1-3 0.3	BB-B 1-3 10.6	Corp IG 6.5	S&P 500 -0.8	BB-B 1-3 4.7	BB-B 1-3 4.5	BB-B 1-3 6.9
Loans 10.0	Corp IG 5.4	HY 2.7	Loans 6.7	BB-B 1-3 3.4	HY -26.4	S&P 500 26.5	Loans 10.1	BB-B 1-3 4.3	BB-B 1-3 10.2	Loans 5.3	HY 2.5	Corp IG -0.6	Loans 10.2	BB-B 1-3 4.9	HY -0.9	Loans 4.2	Loans 3.9	Loans 5.6
Corp IG 8.3	Loans 5.2	Agg 2.4	Corp IG 4.4	HY 2.2	Loans -29.1	Corp IG 19.8	Corp IG 9.5	S&P 500 2.1	Loans 9.7	Corp IG -1.5	BB-B 1-3 2.0	Loans -0.7	Corp IG 6.0	Loans 4.1	Agg -1.5	Corp IG 2.4	Corp IG 3.0	Corp IG 5.4
Agg 4.1	Agg 4.3	Corp IG 2.0	Agg 4.3	Loans 2.1	S&P 500 -37.0	Agg 5.9	Agg 6.5	Loans 1.5	Agg 4.2	Agg -2.0	Loans 1.6	HY -4.6	Agg 2.6	Agg 3.5	Corp IG -2.2	Agg 1.2	Agg 1.8	Agg 3.6

Risk-Adjusted Performance

Credit Quality and Maturity Optimization

BB-B rated loans and BB-B rated 1-3 year corporate bonds have consistently exhibited greater returns per unit of risk than other corporate investment grade, high yield, and government bonds.

Risk-Return Periodic Tables: Trailing Sharpe Ratios by Credit Quality

BB-B 1-3 Year Bonds vs Bond Universe

3 Year	5 Year	7 Year
BB-B 1-3Y 1.51	BB-B 1-3Y 1.64	BB-B 1-3Y 1.69
BB 0.91	BB 1.02	BB 1.19
HY 0.82	HY 0.88	BBB 1.09
B 0.74	B 0.80	IG Corp 1.06
CCC 0.72	BBB 0.70	HY 1.01
BBB 0.54	IG Corp 0.68	B 0.96
IG Corp 0.50	CCC 0.65	Agg 0.94
Agg 0.24	Agg 0.50	CCC 0.68
Treas -0.02	Treas 0.25	Treas 0.63

BB-B Loans vs Loan and Bond Universe

3 Year	5 Year	7 Year
BB Loan 1.85	BB Loan 1.92	BB Loan 1.46
B Loan 1.22	B Loan 1.35	B Loan 1.19
HY Corp Bond 0.82	HY Corp Bond 0.88	IG Corp Bond 1.06
IG Corp Bond 0.50	IG Corp Bond 0.68	HY Corp Bond 1.01
CCC Loan 0.46	CCC Loan 0.56	Agg Bond 0.94
Agg Bond 0.24	Agg Bond 0.50	Treas Bond 0.63
Treas Bond -0.02	Treas Bond 0.25	CCC Loan 0.60

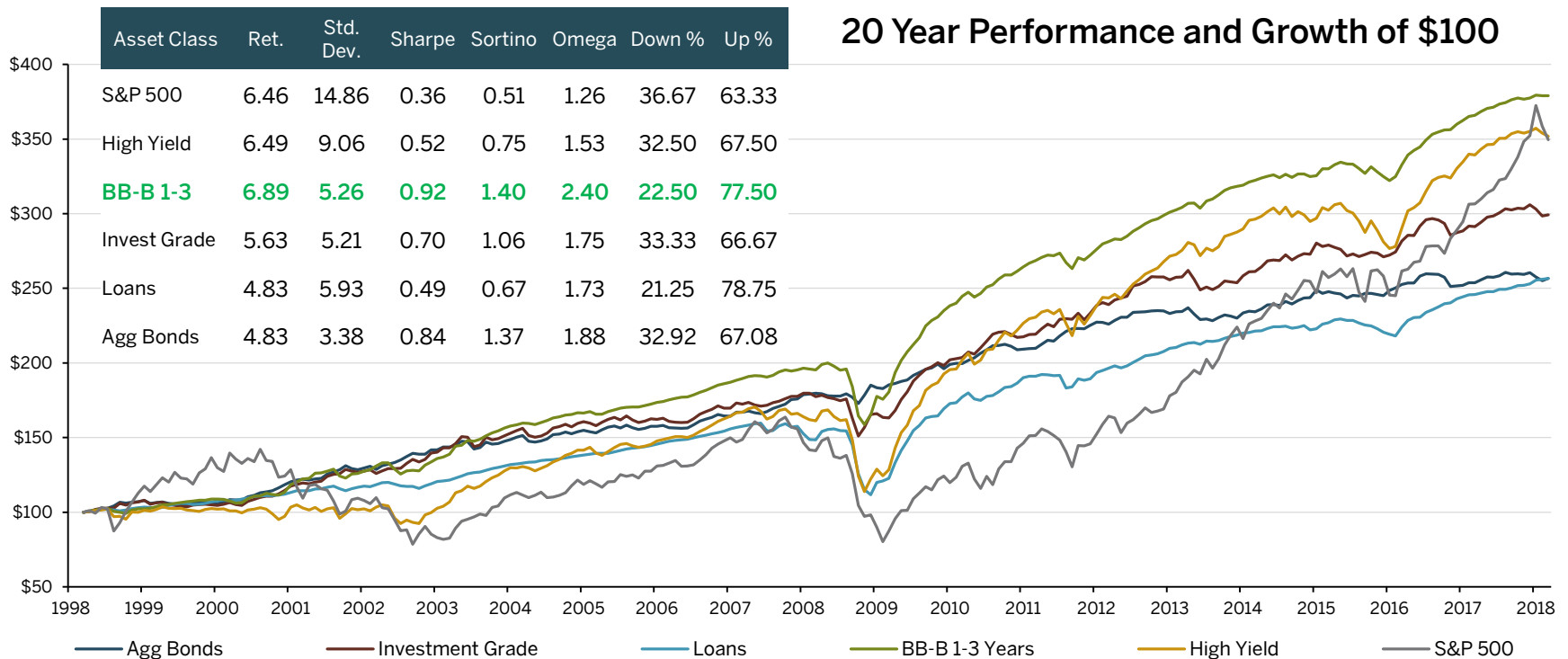
Issuers of High Yield Bonds and/or Floating Rate Loans



Short Duration BB-B Rated Corporate Bonds

BB-B Rated 1-3 Year Bonds – An Overlooked and Underutilized Outperformer

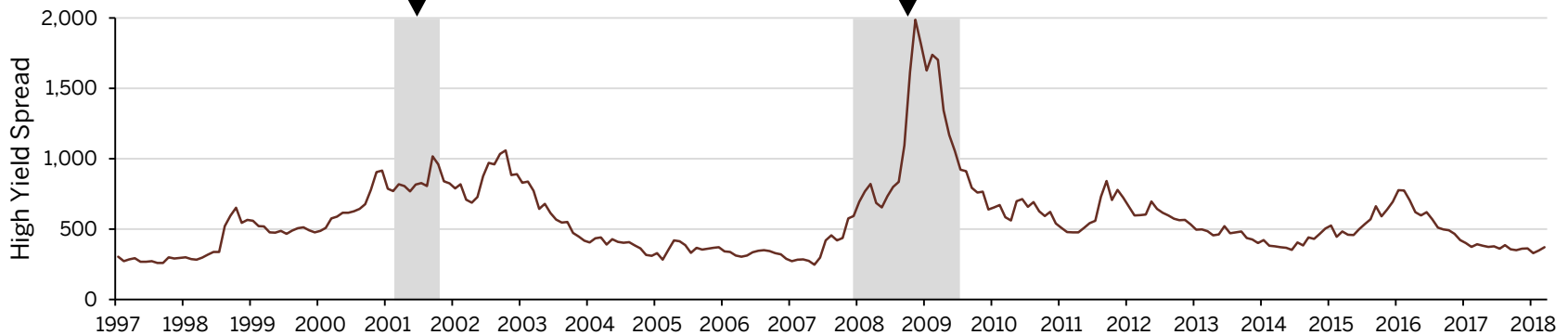
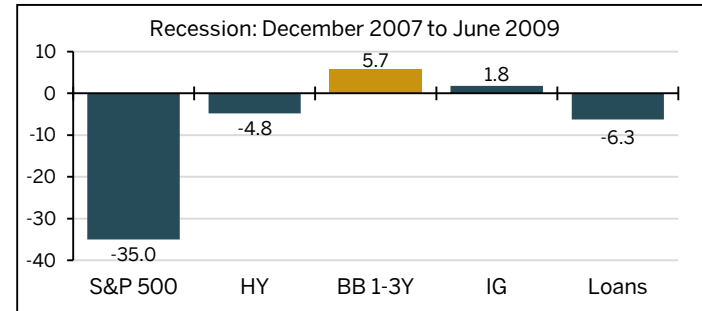
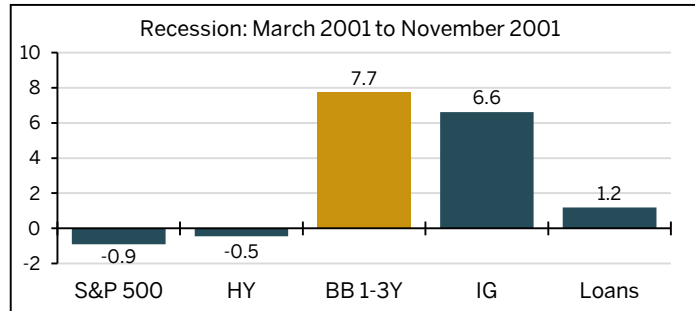
- Return profile more consistent over short-, medium-, and long-term, outperforming both IG and HY bonds
- Little to no recognition in databases like Morningstar, which lacks a dedicated short duration high yield category
- BB-B rated 1-3 year bonds are capacity constrained, creating economic disincentive for large fixed income managers



Short Duration BB-B Rated Corporate Bonds

Recessions, Spreads, and “Timing the Market”

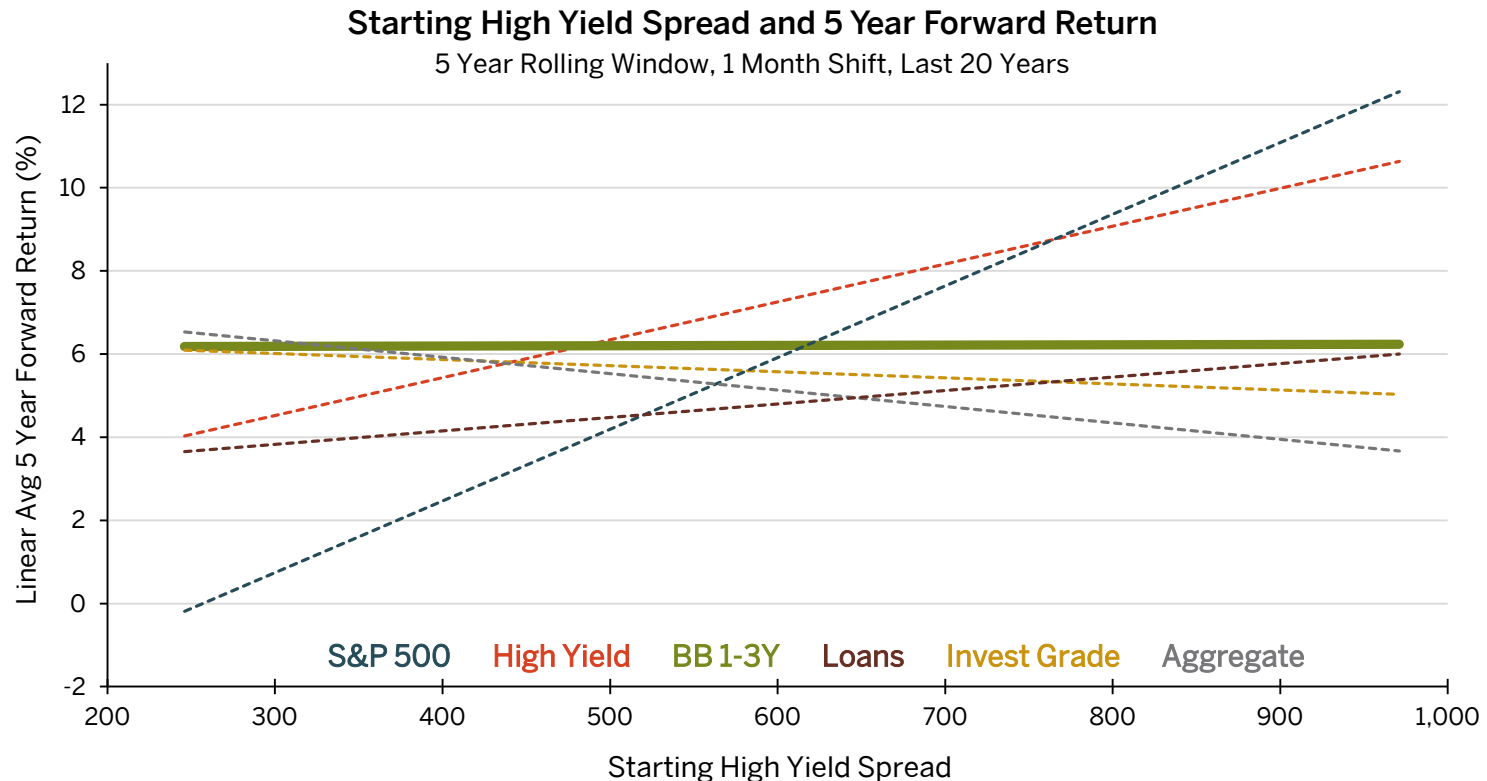
- Market conditions have potential to impact future returns; leads many down notoriously hard path of timing the market
 - Timing is risky: 81% of CCC, 62% of S&P 500, and 40% of HY 20 year returns derived from top 12 months
 - Figure falls to 24% for 1-3 year BB rated bonds; same as investment grade corporates and 4% lower than treasuries
- BB-B rated short duration bonds have outperformed investment grade over the last two recession periods



Short Duration BB-B Rated Corporate Bonds

Durability Throughout the Market Cycle with Minimal Entry Point Risk

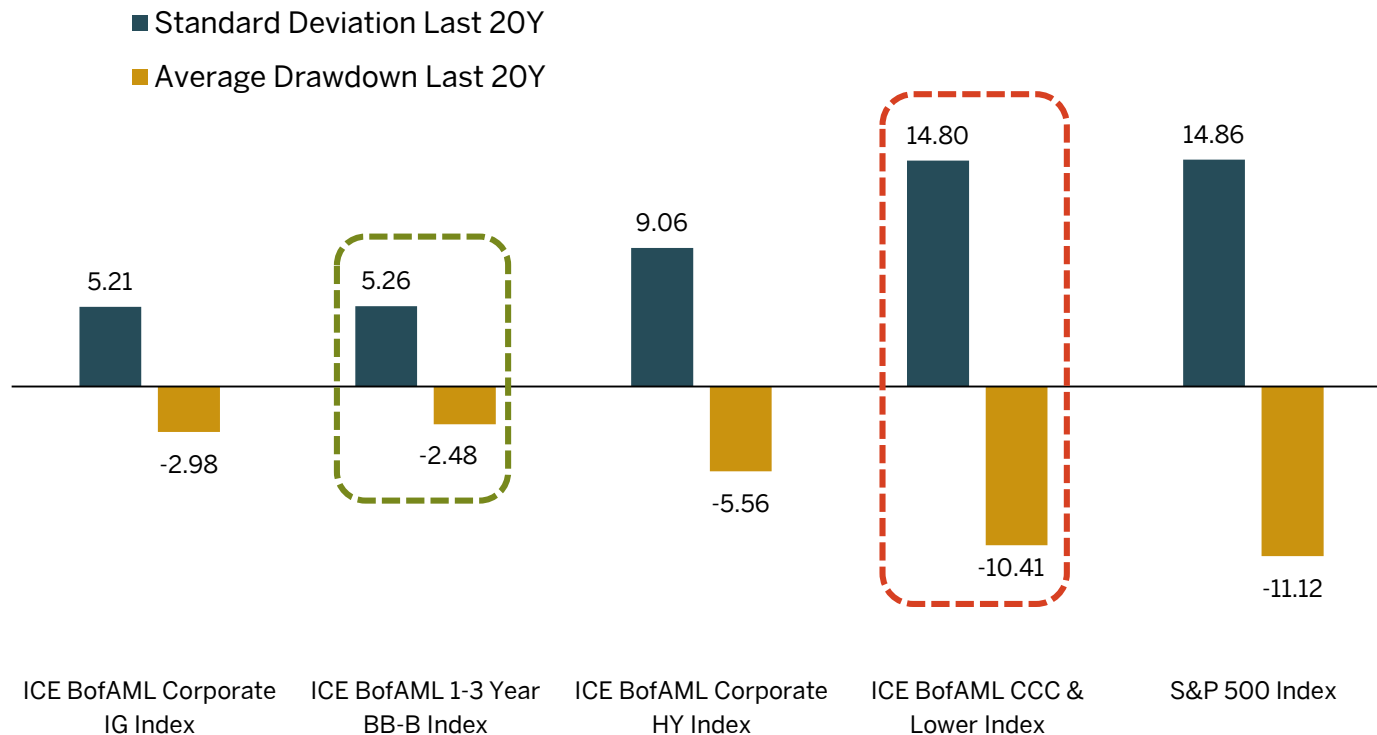
- HY spreads at entry had minimal effect on rolling 5 year returns for BB-rated 1-3 year bonds over last 20 years
 - Spreads at entry had large affect on other asset classes
- Relative indifference to market timing has historically made it a great alternative as a long-term portfolio fixture or for periods of uncertainty



Short Duration BB-B Rated Corporate Bonds

Harvesting the optimal risk-reward anomaly within BB-B rated 1-3 year bonds

- We believe that credit investors are not adequately rewarded for outsized risk taking
- CCC's have historically exhibited equity-like volatility and downside



Short Duration BB-B Rated Corporate Bonds

Trading Advantage – Harvesting Market Inefficiency

- For short maturity bonds, small changes in dollar price lead to relatively large changes in yield
- High yield strategies generally sell their lowest yielding and shortest maturity bonds as they need cash to pursue total returns
- This creates an opportunity to purchase relatively safe bonds at attractive risk-adjusted returns
- A disciplined Short Duration Credit strategy seeks to harvest these market inefficiencies

Total Return Seller

Total return high yield seller sees no capital appreciation potential and below market yield, seeks to redeploy capital into new issue market. With little time remaining until first call date, foregoes 0.2 points of upside to potential tender price and sells bond, booking capital gain on past purchase.

Short Duration Buyer

Short duration buyer sees attractive coupon and is willing to pay above call price in order to capture no worse than a 3.8% return. May view early tender as unlikely but maintains upside optionality with purchase below potential tender price. Bond is eventually tendered at 104 in January 2018 for a 7.5% return.

Sunoco LP 6.25% 4/15/21
First Call: April 15, 2018 at 103.125

Actual Trades
12/19/17

Total Return Seller	
Potential Early Tender	104
Selling Price	103.78
Yield to Worst	4.08%
Yield to Worst of High Yield Market	5.82%

Short Duration Buyer	
Potential Early Tender	104
Buying Price	103.84
Yield to Worst	3.84%
Yield to Worst of BB Short Dur Market	3.30%

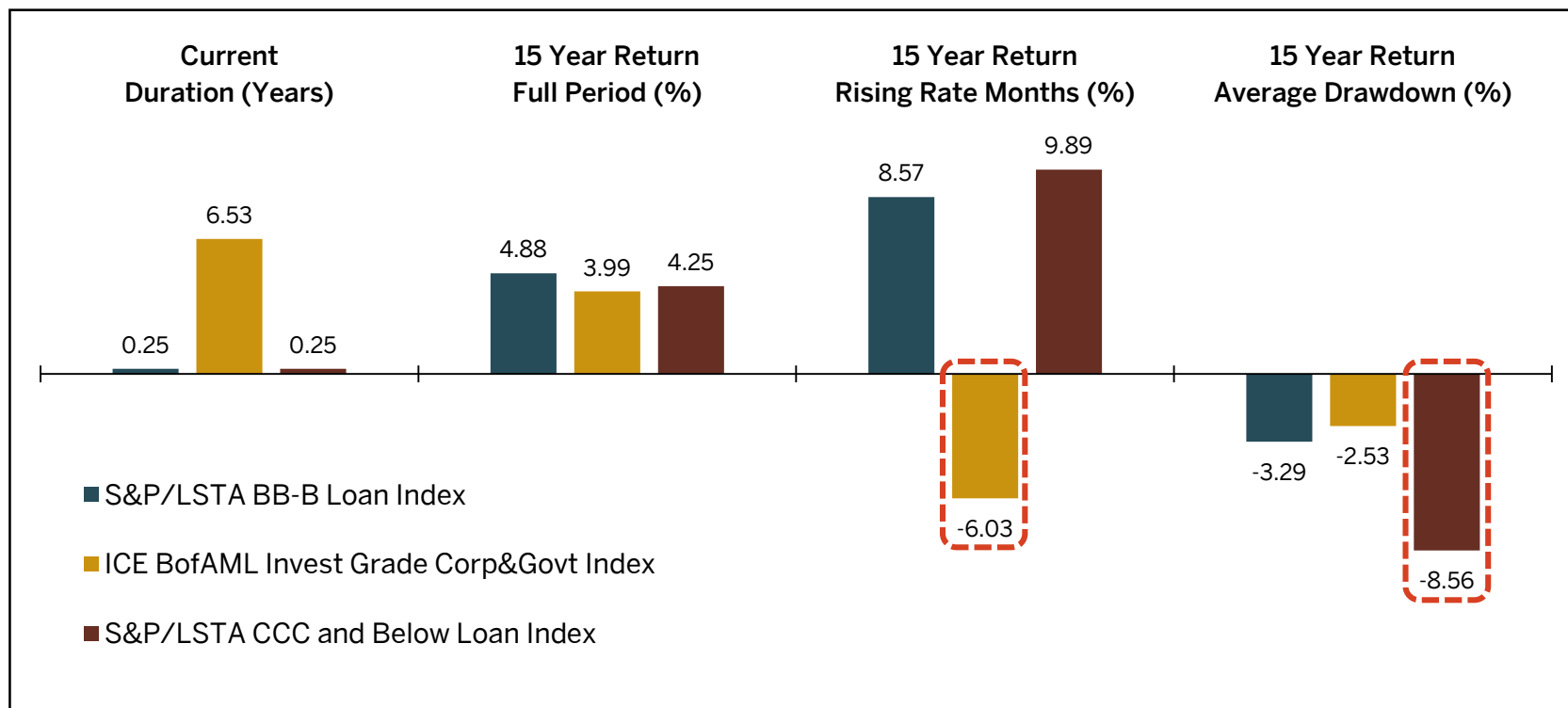
Trading Advantage + Capacity Constraint = Market Inefficiency Harvest

BB-B Rated Floating Rate Loans

BB-B Rated Loans – Capitalizing on Rising Rates While Seeking to Minimize the Downside

Penn Capital believes that BB-B rated loans exhibit an optimal balance of interest rate and credit risk protection, which, we believe are ideal characteristics within the current low and rising rate and late cycle environment

Asset Class	Rising Rate Protection	Capital Preservation
Investment Grade Bonds	X	✓
BB-B Rated Loans	✓	✓
CCC Rated Loans	✓	X



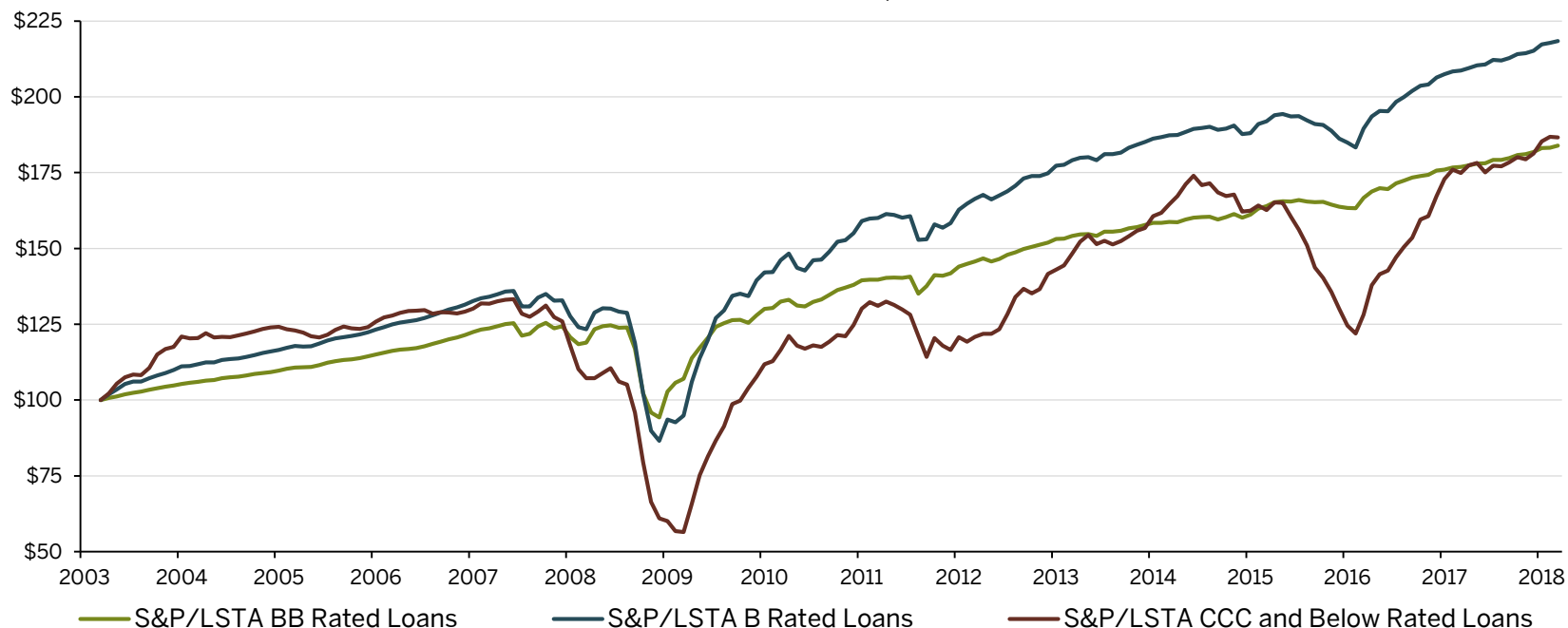
BB-B Rated Floating Rate Loans

The Durability Effect – Winning by Not Losing

- BB-B loans are non-distressed, well capitalized, and senior within the capital structure; exhibiting lower default risk and higher recovery rates
- The BB-B loan return profile typically exhibits greater consistency and risk-adjusted performance than the lower quality loan market
- However, lower quality loans are still used by the majority of managers who seek to enhance yield at the expense of downside risk and liquidity

Loan Performance by Credit Rating

15 Year Growth of \$100

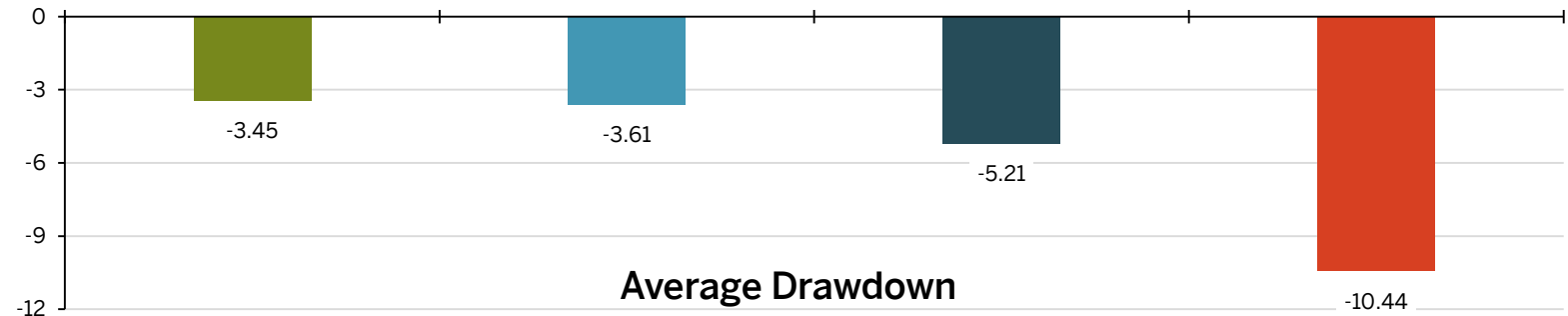
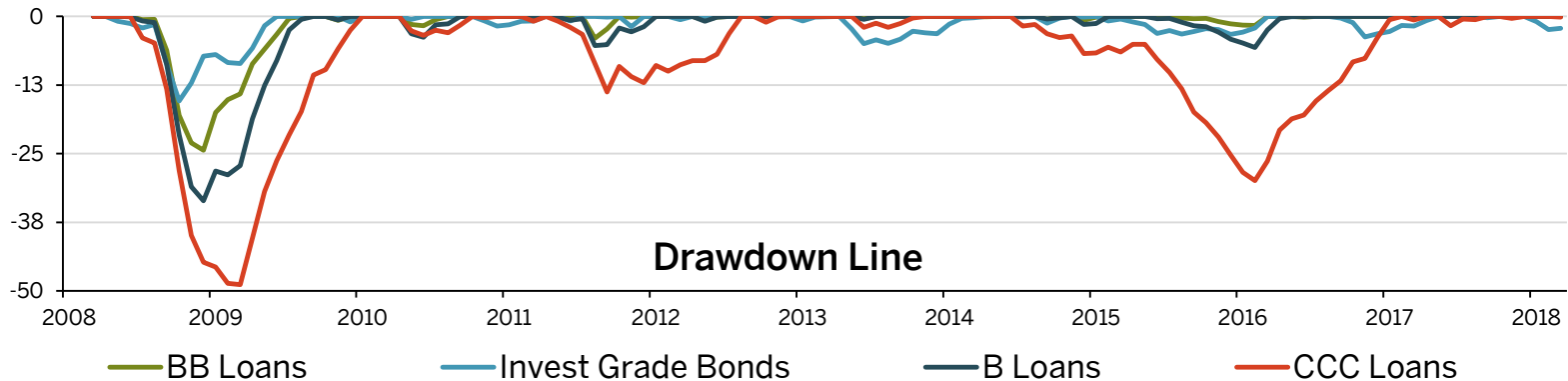


BB-B Rated Floating Rate Loans

Credit and Liquidity Protection Potential – Minimizing Market Downside and Event Risk

- BB-B loan event risk, drawdown, and standard deviation of returns in line with investment grade bonds over last 10 years
- Lower quality loans have historically seen 3 times the volatility and downside experience of higher quality loans and IG bonds
- Lower quality loans face massive drawdowns in down markets due to higher default rates and illiquidity preventing exit opportunities

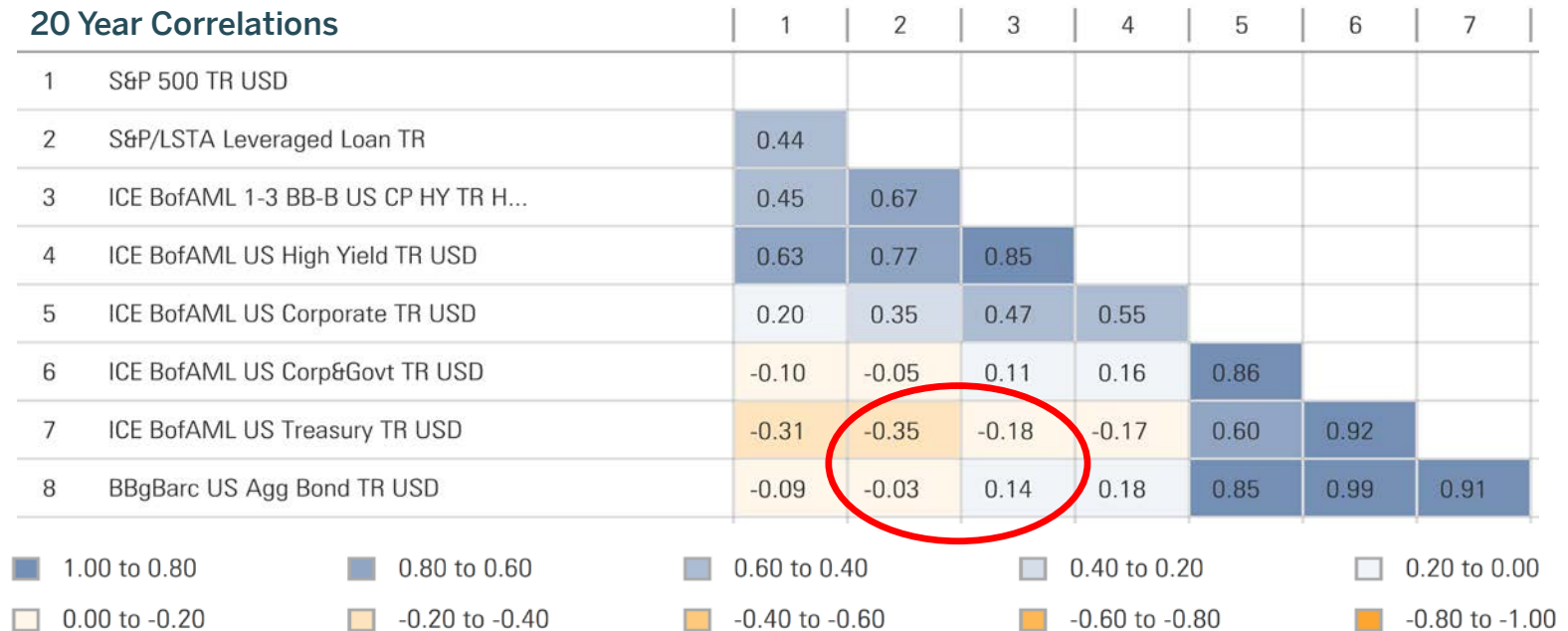
Drawdown Experience by Credit Quality Over the Last 10 Years



Optimizing Risk-Return Characteristics

Correlation, Diversification, and Downside Protection

- Return streams with little or negative correlation can increase portfolio diversification and downside protection
- BB-B Rated Short Duration Bonds and Loans have displayed favorable long-term correlation metrics to Treasury and Aggregate Bond indices



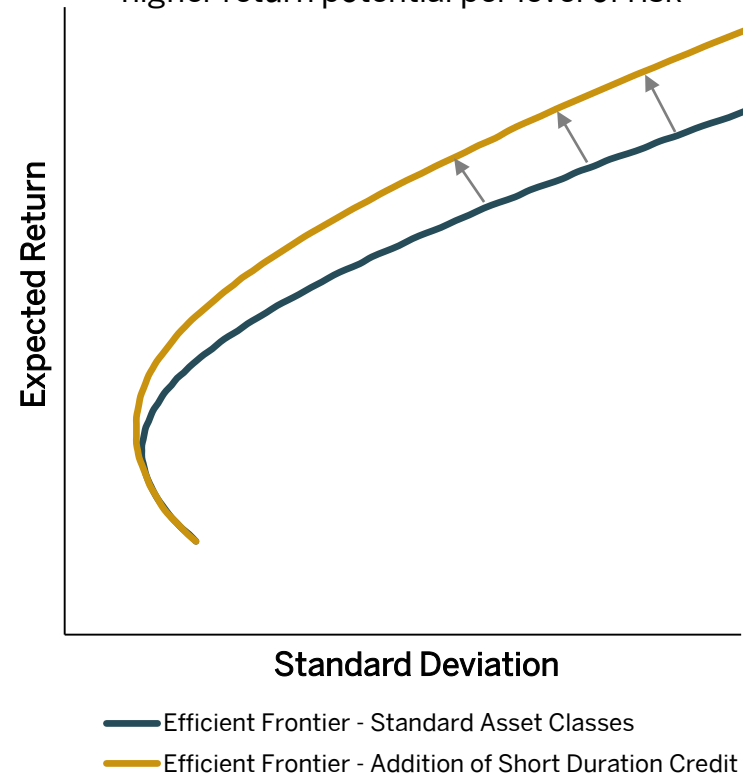
Active Optimization of Short Duration Credit

A Disciplined Approach to Optimal Risk-Return with Four Key Factors



Enhancing the Efficient Frontier

A disciplined Short Duration Credit strategy enhances the efficient frontier, offering higher return potential per level of risk



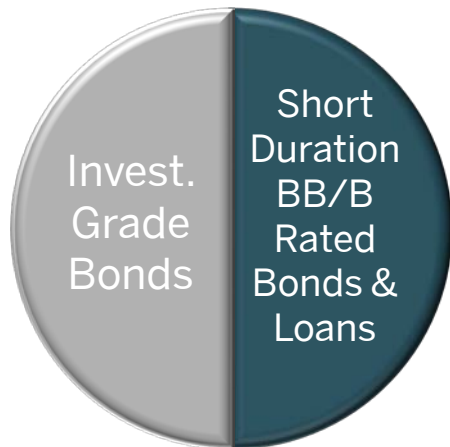
Conclusion: Portfolio Optimization with Short Duration Credit

Short Duration BB/B Rated Bonds and Loans can be used to:
Shorten Duration, Improve Credit Quality, and Enhance Liquidity

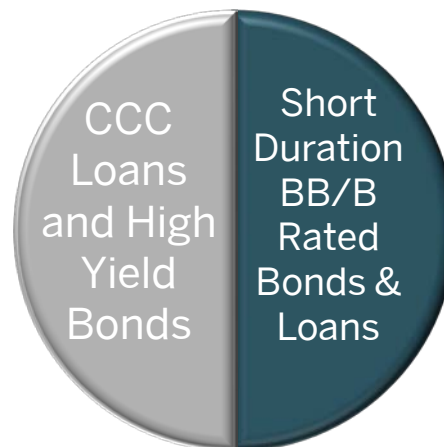
We believe that short duration BB-B rated bonds and loans:

- Shorten duration, improve credit quality, enhance liquidity, and improve the diversification of a portfolio
- Exhibit a unique balance of interest rate and credit risk protection, optimizes the risk-return return potential of a portfolio, thereby enhancing the efficient frontier
- Are optimized with a disciplined investment process utilizing a bottom-up focus on quality and inefficiency capture
- Cannot be effectively emulated by passive investing or large managers, as shown by historic returns, due to liquidity and opportunity constraints

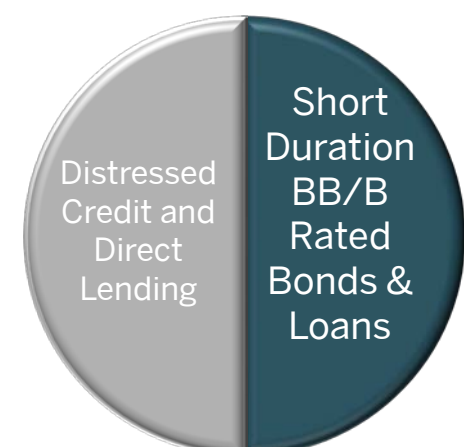
Shortening Duration



Improving Credit Quality



Enhancing Liquidity



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Investing in the stock market involves gains and losses and may not be suitable for all investors. Potential for profit is accompanied by the possibility of loss.

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.

Index Definitions:

The ICE BofA ML US HY BB-B Index is a subset of The Bank of America Merrill Lynch US High Yield Index, which tracks the performance of non-investment-grade corporate bonds rated BB-B. The ICE BofA Merrill Lynch High Yield Index tracks the performance of non-investment grade corporate bonds. The ICE BofA Merrill Lynch US Corporate and Government Index tracks the performance of U.S. dollar denominated investment grade corporate and government debt publicly issued in the US domestic market. Qualifying securities must have an investment grade rating (based on an average of Moody's, S&P and Fitch). In addition, qualifying securities must have at least one year remaining term to final maturity, a fixed coupon schedule and a minimum amount outstanding of \$250 million. The ICE BofA Merrill Lynch US 1-3 Year Corporate and Government Index is a subset of the ICE BofA Merrill Lynch US Corporate and Government Index, which tracks the performance of U.S. dollar denominated investment grade corporate and government debt publicly issued in the US domestic market with years to maturity from 1 to 3 years. The Bloomberg Barclays US Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed rate taxable bond market. The ICE BofA ML US HY Cash Pay BB-B Rated 1-3 Year Index is a subset of The Bank of America Merrill Lynch US Cash Pay High Yield Index, which tracks the performance of non-investment-grade corporate bonds with a remaining term to final maturity less than three years and rated BB-B. The ICE BofA ML US HY Cash Pay BB Rated 1-3 Year Index is a subset of The Bank of America Merrill Lynch US Cash Pay High Yield Index, which tracks the performance of non-investment-grade corporate bonds with a remaining term to final maturity less than three years and rated BB. The ICE BofA Merrill Lynch High Yield CCC & Lower Rated Index is an unmanaged portfolio constructed to mirror the public high yield debt market. The S&P/LSTA Leveraged BB/B Loan Index is a market value-weighted index designed to measure the performance of the US leveraged loan market and is comprised of loans whose rating is BB+, BB, BB-, B+, B or B-. Standard & Poor's Rating Services is used to determine membership within this sub-index. The S&P 500 Index is a capitalization-weighted index of 500 stocks intended to be a representative sample of leading companies in leading industries within the U.S. economy. The ICE BofA Merrill Lynch US Corporate Index tracks the performance of US dollar denominated investment grade corporate debt publicly issued in the US domestic market. The ICE BofAML BB/B Rated 1-3 Yr. Euro Developed Markets High Yield Constrained Index tracks the total return performance of the outstanding debt of European sovereign issuers. It is a market-capitalization weighted basket comprising bonds issued in their respective domestic markets and denominated in their local currency. This index is further segmented by debt issues maturing in one to three years and rated B to BB. The ICE BofAML 1-3 Year BBB Euro Corporate Index tracks the total return performance of the outstanding debt of European sovereign issuers. It is a market-capitalization weighted basket comprising bonds issued in their respective domestic markets and denominated in their local currency. This index is further segmented by debt issues maturing in one to three years and rated BBB. The ICE BofA Merrill Lynch 10+ Year Treasury Index is a subset of the ICE BofA Merrill Lynch Treasury Master Index. The index measures the total return performance of U.S. Treasury bonds with an outstanding par that is greater than or equal to \$25 million. The maturity range of these securities is greater than ten years. The ICE BofA ML US HY Cash Pay BB-B Rated 1-5 Year Index is a subset of The Bank of America Merrill Lynch US Cash Pay High Yield Index, which tracks the performance of non-investment-grade corporate bonds with a remaining term to final maturity less than five years and rated BB-B.