



Pacific Region Investment
Conference

November 2018

FOR FINANCIAL PROFESSIONAL USE ONLY. NOT FOR USE WITH THE INVESTING PUBLIC.

Manager views expressed herein were current as of the date indicated in this presentation, review the general fixed income investment market, are for illustrative purposes only and are subject to change. It should not be assumed that recommendations made in the future will be profitable or will equal the performance of the securities in this presentation. Index performance data quoted represents past performance and does not guarantee future results.

Representing the firm:

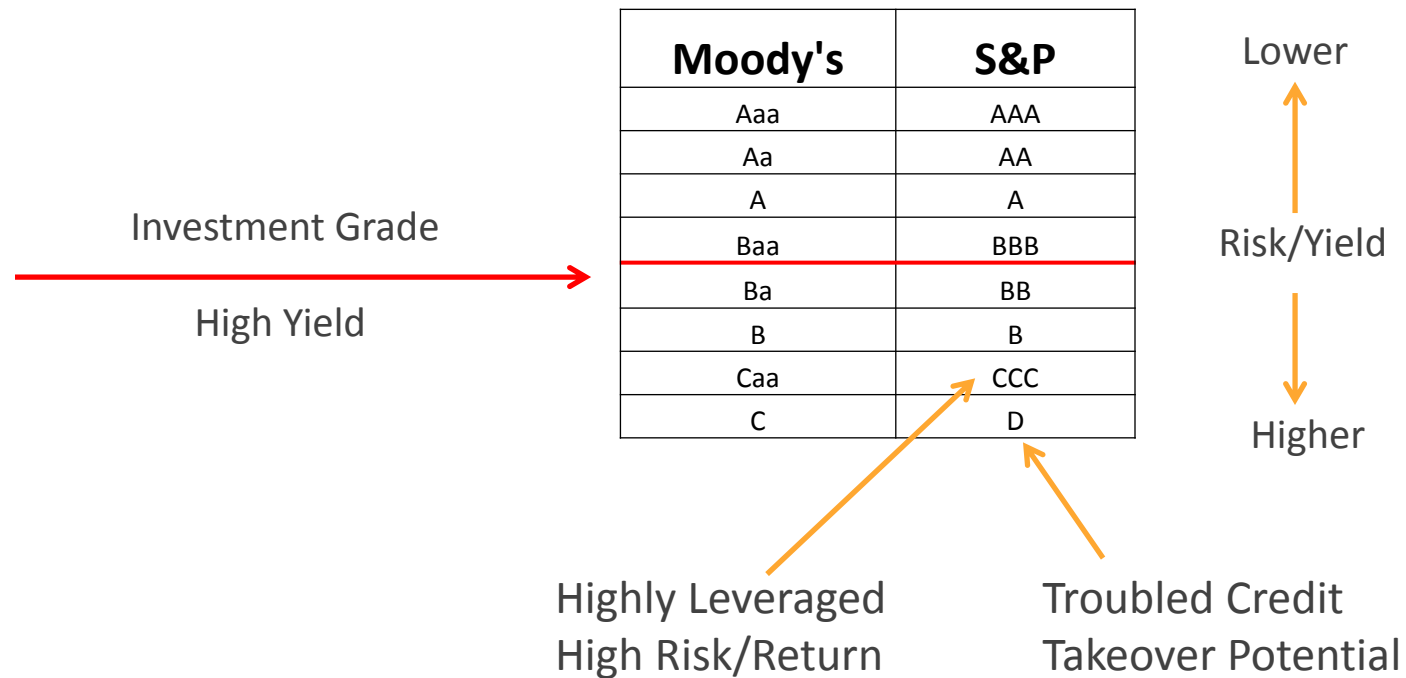
Jason B. Stewart, CIMA
West Regional Director

High Yield Bonds Defined

- High Yield bonds are issued by companies that do not qualify for “investment grade” ratings by one or more of the major ratings agencies (Moody’s, S&P, and Fitch).
- These issuers must pay a higher interest rate in order to attract investors to compensate them for the risk associated with investing in organizations of lower credit quality.
- Low correlation with other parts of the bond market
- Often perform well in a rising interest rate environment
 - Investment Grade bonds trade on interest rates and rate expectations. High Yield tends to trade on credit and economic sensitivity.

Past performance does not guarantee future results.

U.S. High Yield Bond Market



Source: Moody's and S&P Ratings Agencies

Fixed Income Yields and Returns

As of September 30, 2018

U.S. Treasuries	Yield		Return				Sector	Yield		Return			
	9/30/2018	12/31/2017	2018 YTD	Avg. Maturity	Correlation to 10-year	Correlation to S&P 500		9/30/2018	12/31/2017	2018 YTD	Avg. Maturity	Correlation to 10-year	Correlation to S&P 500
2-Year	2.81%	1.89%	0.12%	2 years	0.71	-0.30	Convertibles	5.85%	6.35%	8.35%	-	-0.28	0.89
5-Year	2.94%	2.20%	-1.35%	5	0.92	-0.28	Floating Rate	3.10%	2.05%	2.06%	3.2	-0.33	0.38
TIPS	0.91%	0.44%	-0.84%	10	0.58	0.23	High Yield	6.24%	5.72%	2.57%	6.0	-0.22	0.69
10-Year	3.05%	2.40%	-3.73%	10	1.00	-0.29	MBS	3.59%	2.91%	-1.07%	7.8	0.81	-0.10
30-Year	3.19%	2.74%	-6.55%	30	0.93	-0.31	Broad Market	3.46%	2.71%	-1.60%	8.4	0.87	0.02
							Corporates	4.07%	3.25%	-2.33%	10.9	0.52	0.29
							Municipals	2.76%	2.28%	-0.66%	9.9	0.55	-0.10

Source: Barclays, Bloomberg, FactSet, Standard & Poor's, U.S. Treasury, J.P. Morgan Asset Management. Sectors shown above are provided by Bloomberg and are represented by – Broad Market: U.S. Aggregate; MBS: U.S. Aggregate Securitized - MBS; Corporate: U.S. Corporates; Municipals: Muni Bond 10-year; High Yield: Corporate High Yield; TIPS: Treasury Inflation Protection Securities (TIPS); Floating Rate: FRN (BBB); Convertibles: U.S. Convertibles Composite. Yield and return information based on bellwethers for Treasury securities. Sector yields reflect yield to worst. Convertibles yield is based on US portion of Bloomberg Barclays Global Convertibles. Correlations are based on 10-years of monthly returns for all sectors. Change in bond price is calculated using both duration and convexity according to the following formula: $New\ Price = (Price + (Price * Duration * Change\ in\ Interest\ Rates)) + (0.5 * Price * Convexity * (Change\ in\ Interest\ Rates)^2)$. Chart is for illustrative purposes only. Past performance is not indicative of future results.

Guide to the Markets – U.S. Data are as of September 30, 2018.

Past performance does not guarantee future results.

RESEARCH | STABILITY | CONVICTION

Fixed Income Sector Returns

As of September 30, 2018

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	YTD	2008 - 2017	
												Ann.	Vol.
Treas.	13.7%	High Yield	EMD LCL.	TIPS	EMD USD	High Yield	Muni	Muni	High Yield	EMD LCL.	High Yield	High Yield	High Yield
	13.7%	58.2%	15.7%	13.6%	17.4%	7.4%	8.7%	3.8%	17.1%	15.2%	2.6%	8.0%	21.2%
MBS	8.3%	EMD USD	High Yield	Muni	EMD LCL.	MBS	Corp.	MBS	EMD USD	EMD USD	Muni	EMD USD	EMD LCL.
	8.3%	29.8%	15.1%	12.3%	16.8%	-1.4%	7.5%	1.5%	10.2%	10.3%	-0.7%	7.3%	13.0%
Barclays Agg	5.2%	EMD LCL.	EMD USD	Treas.	High Yield	Corp.	EMD USD	EMD USD	EMD LCL.	High Yield	TIPS	Corp.	EMD USD
	5.2%	22.0%	12.2%	9.8%	15.8%	-1.5%	7.4%	1.2%	9.9%	7.5%	-0.8%	5.6%	11.6%
Muni	1.5%	Corp.	Corp.	Corp.	Corp.	Asset Alloc.	MBS	Treas.	Corp.	Corp.	MBS	Asset Alloc.	Corp.
	1.5%	18.7%	9.0%	8.1%	9.8%	-1.9%	6.1%	0.8%	6.1%	6.4%	-1.1%	5.0%	6.8%
Asset Alloc.	0.1%	Asset Alloc.	Asset Alloc.	Asset Alloc.	Asset Alloc.	Barclays Agg	Barclays Agg	Barclays Agg	Asset Alloc.	Muni	Asset Alloc.	Muni	TIPS
	0.1%	14.7%	7.9%	8.1%	7.4%	-2.0%	6.0%	0.5%	4.7%	5.8%	-1.5%	4.9%	6.6%
TIPS	-2.4%	TIPS	Barclays Agg	Barclays Agg	TIPS	Muni	Asset Alloc.	Asset Alloc.	TIPS	Asset Alloc.	Barclays Agg	Barclays Agg	Treas.
	-2.4%	11.4%	6.5%	7.8%	7.0%	-2.2%	5.5%	-0.3%	4.7%	5.3%	-1.6%	4.0%	5.4%
Corp.	-4.9%	Muni	TIPS	EMD USD	Muni	Treas.	Treas.	Corp.	Barclays Agg	Barclays Agg	Treas.	MBS	Asset Alloc.
	-4.9%	9.9%	6.3%	7.3%	5.7%	-2.7%	5.1%	-0.7%	2.6%	3.5%	-1.7%	3.8%	4.9%
EMD LCL.	-5.2%	Barclays Agg	Treas.	MBS	Barclays Agg	EMD USD	TIPS	TIPS	MBS	TIPS	Corp.	EMD LCL.	Muni
	-5.2%	5.9%	5.9%	6.2%	4.2%	-5.3%	3.6%	-1.4%	1.7%	3.0%	-2.3%	3.6%	4.5%
EMD USD	-12.0%	MBS	MBS	High Yield	MBS	TIPS	High Yield	High Yield	Treas.	MBS	EMD USD	TIPS	Barclays Agg
	-12.0%	5.9%	5.4%	5.0%	2.6%	-8.6%	2.5%	-4.5%	1.0%	2.5%	-3.0%	3.5%	3.0%
High Yield	-26.2%	Treas.	Muni	EMD LCL.	Treas.	EMD LCL.	EMD LCL.	EMD LCL.	Muni	Treas.	EMD LCL.	Treas.	MBS
	-26.2%	-3.6%	4.0%	-1.8%	2.0%	-9.0%	-5.7%	-14.9%	-0.1%	2.3%	-8.1%	3.3%	3.0%

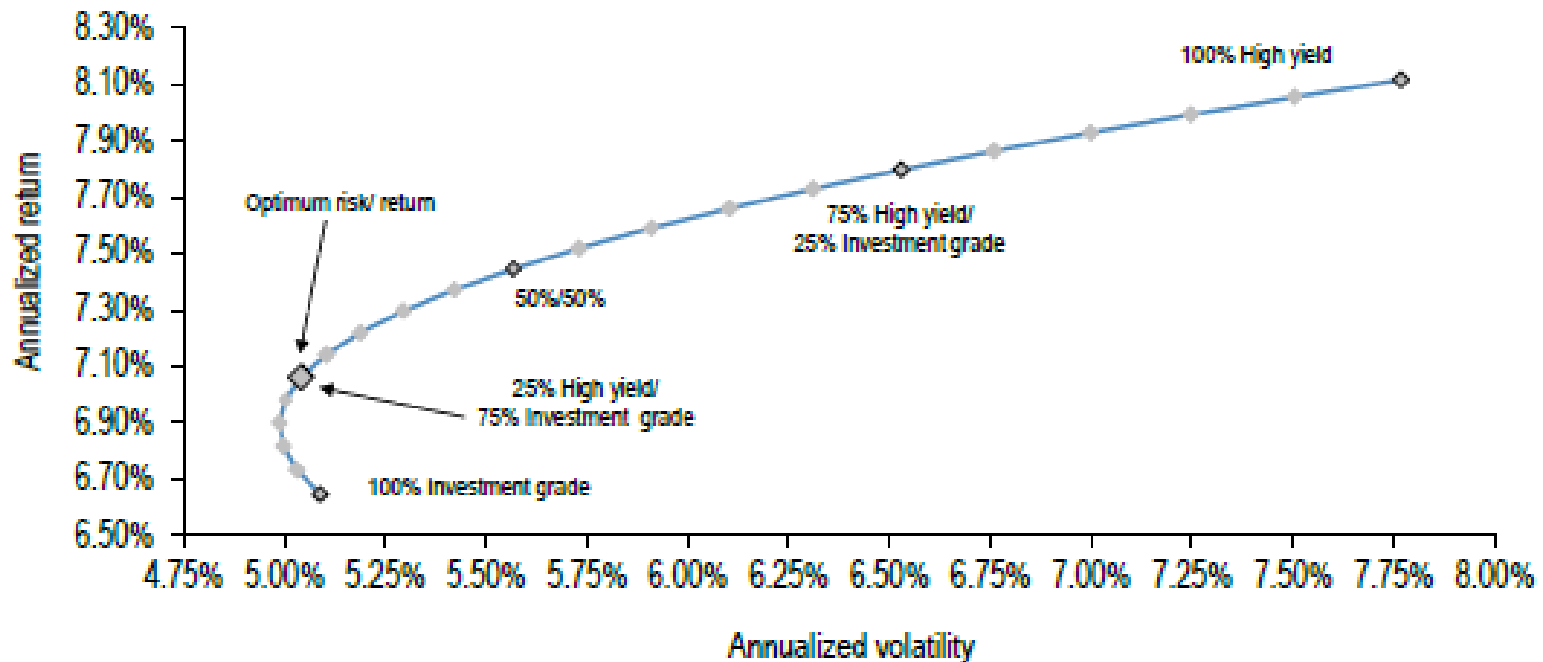
Source: Barclays, Bloomberg, FactSet, J.P. Morgan Global Economic Research, J.P. Morgan Asset Management.

Past performance is not indicative of future returns. Fixed income sectors shown above are provided by Bloomberg unless otherwise noted and are represented by Broad Market: Bloomberg Barclays U.S. Aggregate Index; MBS: Bloomberg Barclays US Aggregate Securitized - MBS Index; Corporate: Bloomberg Barclays U.S. Aggregate Credit - Corporates - Investment Grade; Municipals: Bloomberg Barclays Municipal Bond 10-Year Index; High Yield: Bloomberg Barclays U.S. Aggregate Credit - Corporate - High Yield Index; Treasuries: Bloomberg Barclays Global U.S. Treasury; TIPS: Bloomberg Barclays Global Inflation-Linked - U.S. TIPS; Emerging Debt USD: J.P. Morgan EMBIG Diversified Index; Emerging Debt LCL: J.P. Morgan EM Global Index. The "Asset Allocation" portfolio assumes the following weights: 20% in MBS, 20% in Corporate, 15% in Municipals, 5% in Emerging Debt USD, 5% in Emerging Debt LCL, 10% in High Yield, 20% in Treasuries, 5% in TIPS. Asset allocation portfolio assumes annual rebalancing.

Guide to the Markets – U.S. Data are as of September 30, 2018.

Enhance Return Without Increasing Volatility

25 Year High-Yield/ High Grade Trade-Off



Source: J.P. Morgan
Past performance does not guarantee future results.

U.S. High Grade and High Yield Returns

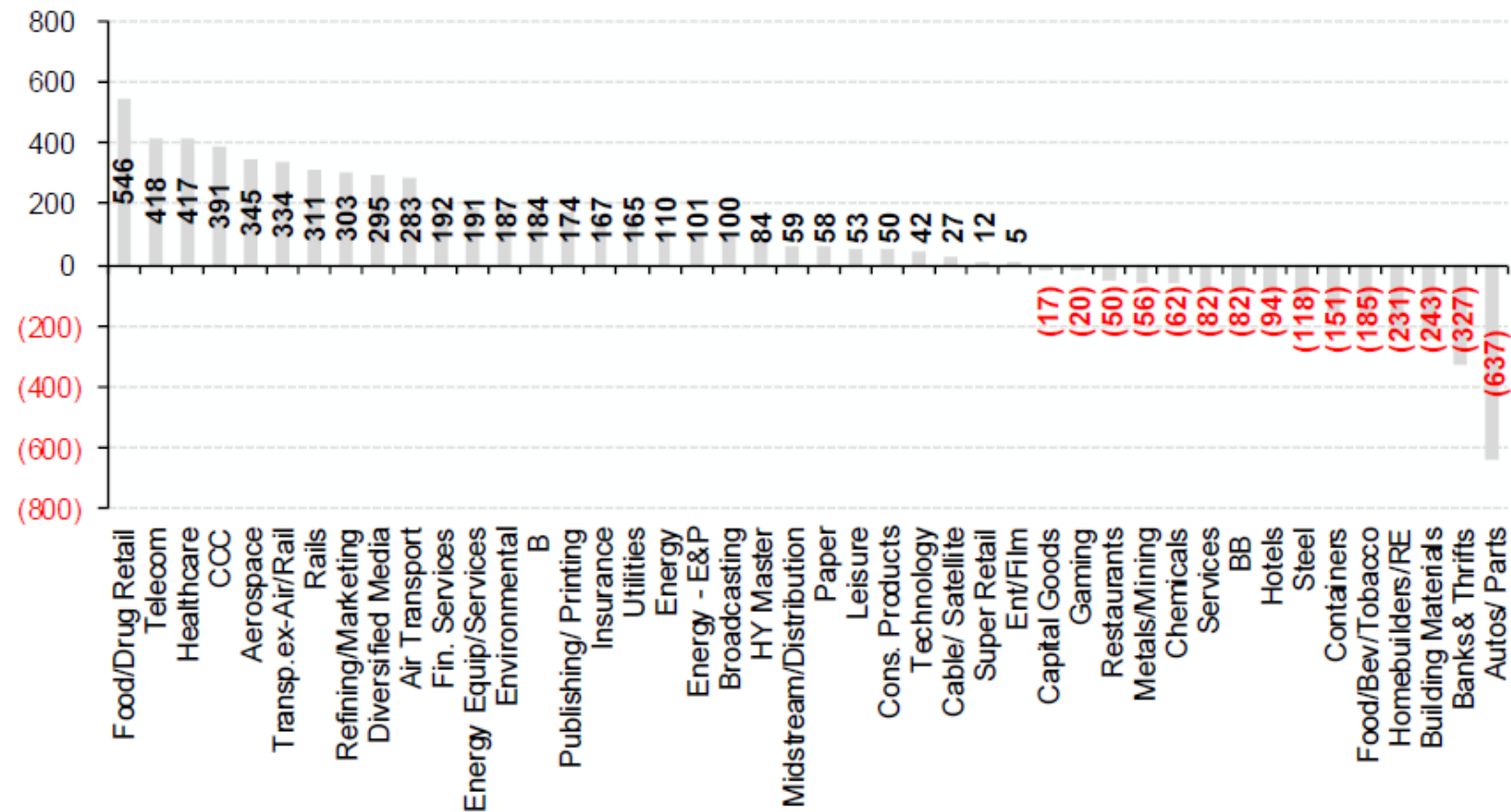
US High Grade and High Yield Comparative Total Returns											
Oct 31, 2018	Short-Term Cumulative Returns						Multi-Year Cumulative				
	YTD	1Mo	3Mo	6Mo	9mo	1yr	2yr	3yr	5yr	10yr	15yr
High Grade Corp.	-3.5%	-1.4%	-1.1%	-0.5%	-3.5%	-2.8%	0.6%	7.7%	15.8%	95.6%	98.6%
AAA	-5.0%	-1.9%	-2.2%	-0.9%	-5.0%	-3.6%	-0.9%	5.8%	14.8%	52.6%	72.3%
AA	-2.7%	-1.0%	-0.8%	-0.1%	-2.7%	-2.2%	0.0%	5.5%	13.7%	65.5%	76.8%
A	-3.5%	-1.1%	-1.0%	-0.4%	-3.5%	-2.9%	-0.2%	6.0%	14.4%	87.9%	85.1%
BBB	-3.6%	-1.6%	-1.3%	-0.7%	-3.6%	-2.9%	1.5%	9.8%	17.5%	119.7%	119.6%
High Yield Corp.	0.8%	-1.6%	-0.3%	1.1%	0.8%	0.9%	10.1%	21.3%	25.7%	188.0%	190.9%
BB	-0.8%	-1.4%	-0.2%	0.6%	-0.8%	-0.8%	6.8%	16.3%	26.2%	174.6%	181.5%
B	1.8%	-1.6%	-0.2%	1.4%	1.8%	1.7%	11.0%	21.0%	23.7%	153.8%	162.0%
CCC	3.9%	-2.8%	-1.4%	2.1%	3.9%	4.6%	19.9%	42.0%	32.4%	284.2%	261.4%

Source: CreditSights, ICE BofAML

Past performance does not guarantee future results.

U.S. High Yield Industry and Rating Tier Indexes

US HY Industry and Rating Tier Indexes Total Returns YTD

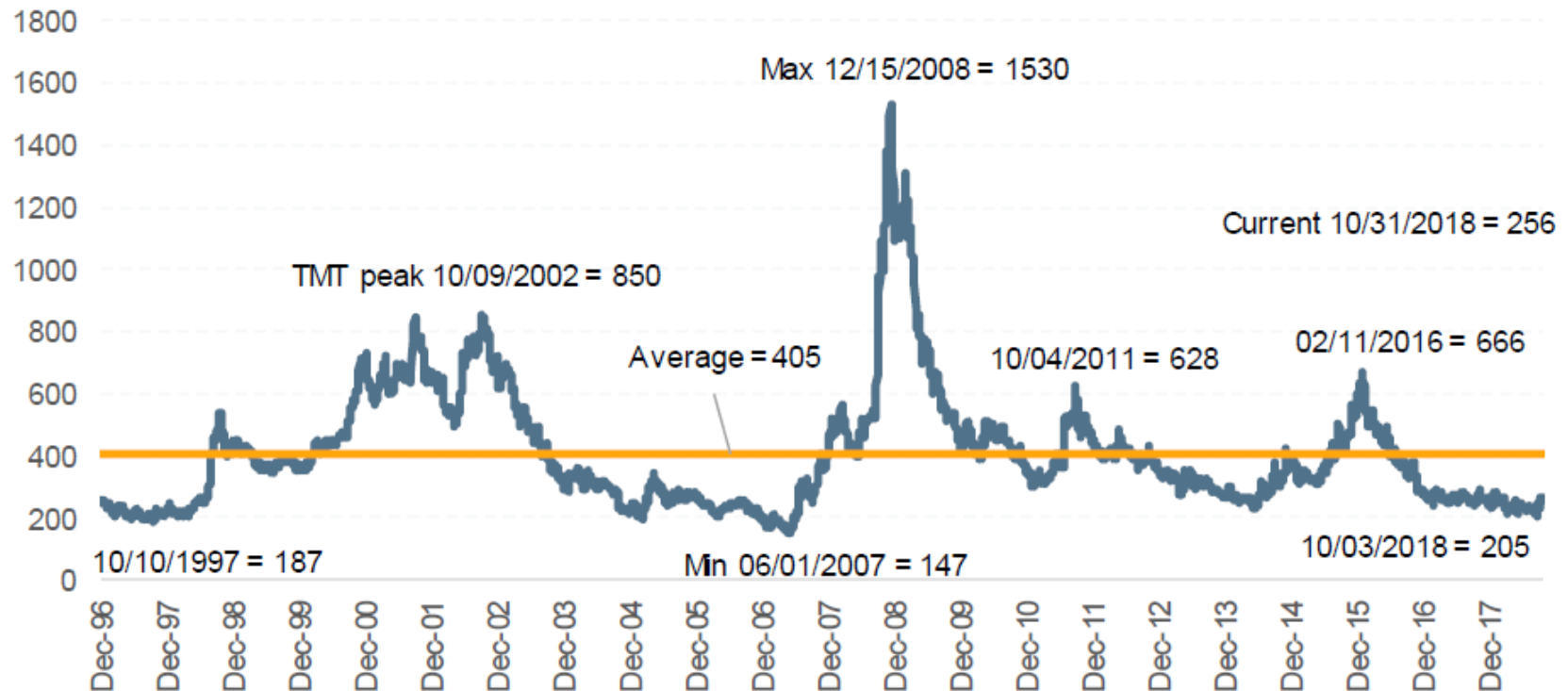


Source: CreditSights, ICE BofAML Indices data through 10/31/2018

Past performance does not guarantee future results.

U.S. High Grade to High Yield Quality Comparison

US HG to HY Quality Spread Comparison

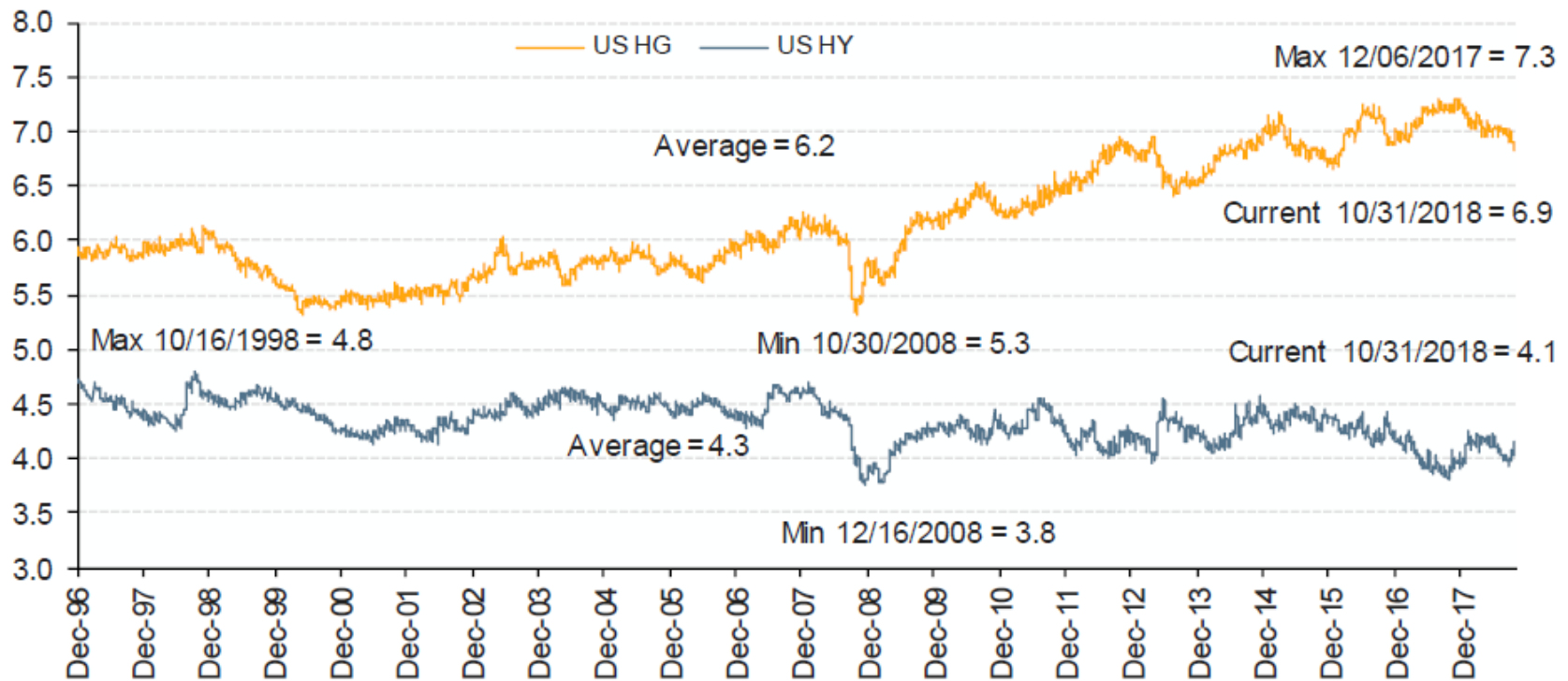


Source: CreditSights, ICE BofAML Indices data from 12/31/1996 through 10/31/2018 median = 362

Past performance does not guarantee future results.

U.S. High Yield vs. U.S. High Grade Index Duration

US High Yield vs. US High Grade Index Duration

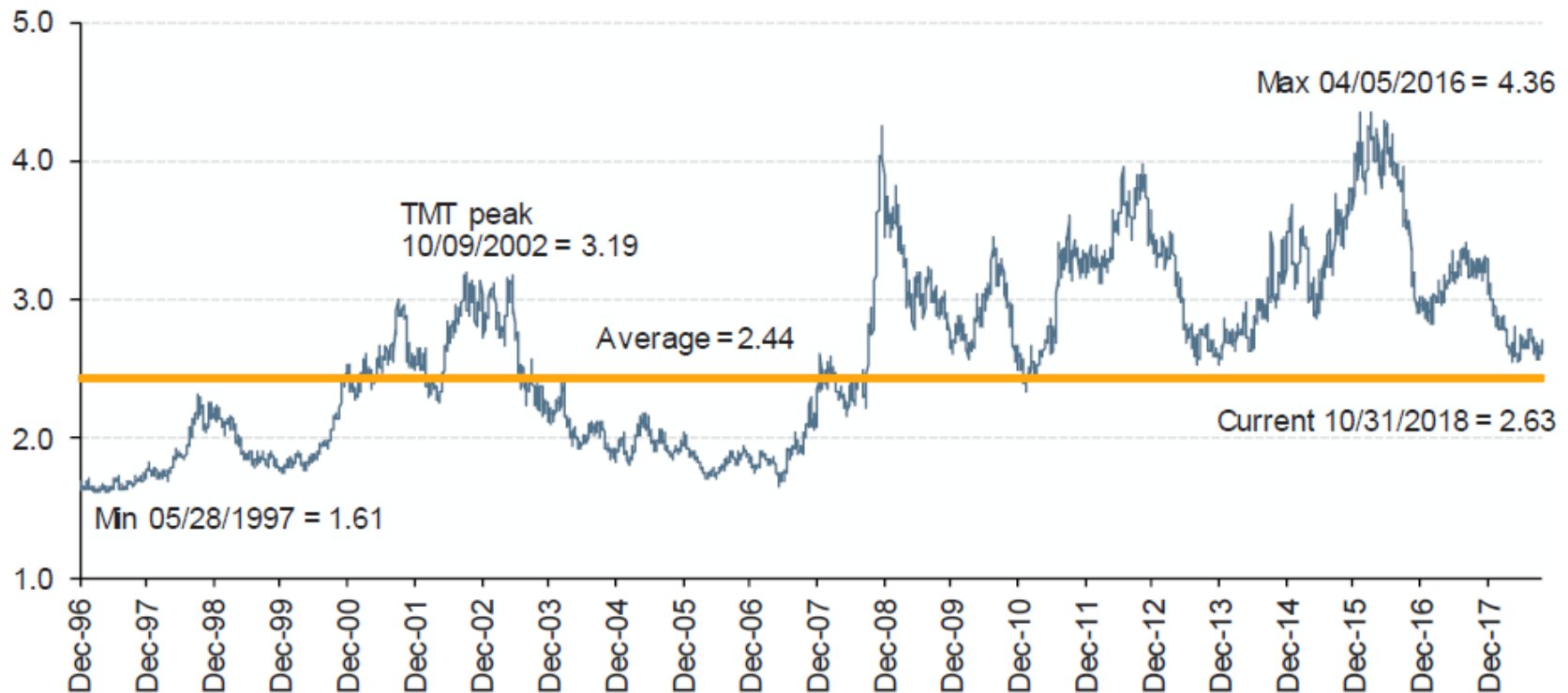


Source: CreditSights, ICE BofAML Indices data through 10/31/2018 duration is effective duration

Past performance does not guarantee future results.

Yield Per Unit of Duration

Yield per Unit of Duration - HY Yield per Unit of Duration / HG Yield per Unit of Duration



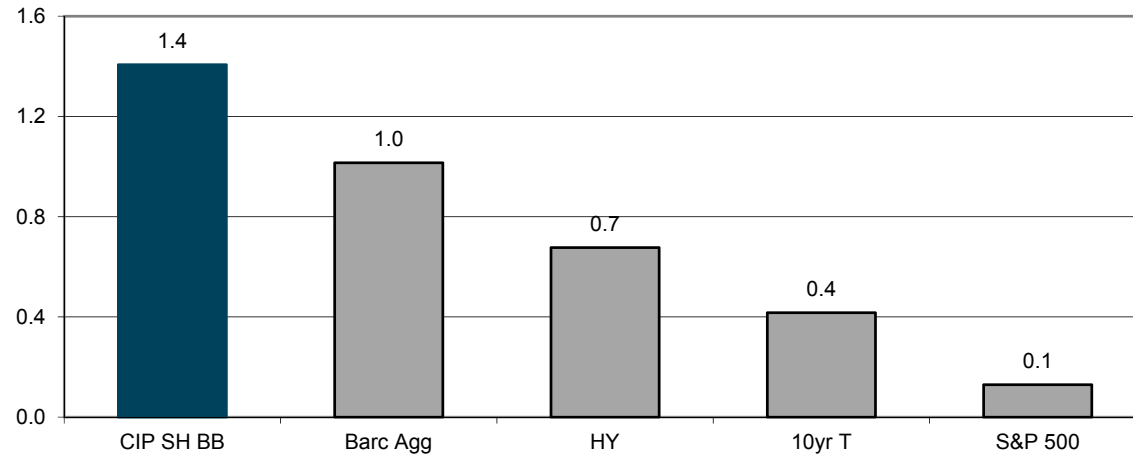
Source: CreditSights, ICE BofAML Indices long term median = 2.21 data as of 10/31/2018 duration is Effective Duration

Past performance does not guarantee future results.

Relative Yield and Risk

Since inception 01.01.2006

Risk Adjusted Yield (Current Yield / Std Dev)



Past performance does not guarantee future results.
Source: Chartwell Investment Partners

Outlook for High Yield – Points to Consider

- Potential Tailwinds heading into 2019
 - Business friendly regulatory environment
 - Tax cuts multiplier, business and personal
 - Bi-partisan Infrastructure bill?

- Potential Headwinds heading into 2019
 - Inflation, higher interest rates
 - Strong US \$
 - Tariffs, protectionist trade policy

- Portfolio Construction
 - High Yield spreads widened 50+ bps in 2018, and the market now yields over 7.0%.
 - Higher quality and shorter duration positioning are prudent at this time.
 - A “clip the coupon” year (6.0-7.0%) should be very competitive among fixed income alternatives.

Conclusion

- The US High Yield Bond Market Offers:
 - A large opportunity set
 - High current income
 - Low correlation to other bonds
 - Historical performance when interest rates rise
 - Portfolio diversification benefits
 - Total return potential
 - Absolute and risk adjusted (Sharpe Ratio)
 - Potential for compelling returns with manageable risk
 - Credit research, duration management, quality constraints, sector diversification, active management

The products and services marketed by Chartwell TSC Securities Corp. are issued or advised by its affiliates, Chartwell Investment Partners, LLC, an SEC-registered investment advisor or TriState Capital Bank, a Pennsylvania chartered bank.