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Convertibles: Equity Participation with Better Sharpe

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The Pier 88 Investment Team suggest investment grade convertible securities as an interesting investment opportunity in the current market environment as they provide the potential for equity participation with downside protection. The investment grade convertible securities universe is well diversified across industry sectors, geographic regions and market caps. It also offers a current yield that is typically superior to the broader equity markets. Although there are multiple investment strategies for the convertible asset class, Pier 88 believes a fundamental "equity lens" approach provides a superior method to uncover compelling investment opportunities in the current macroeconomic environment. By focusing on the underlying equity element of this hybrid security and concentrating on "delta", a main driver of returns, Pier 88 posits that an investment grade convertible allocation can be a compelling way for investors to achieve more performance from their traditional fixed income portfolios. Further, the asset class may be a way to provide some downside protection for those equity investors who seek to be a little more conservative following a multi-year bull market run in equities.

Convertibles as an Asset Class

The convertible asset class is often overlooked and underfollowed. While convertible securities have been issued for over 100 years, investors continue to debate whether it should be an asset allocation from an equity or fixed income viewpoint.

A convertible asset is a hybrid security with debt-and-equity-like features. For example, a traditional convertible bond has a lower coupon rate than a non-convertible bond issued by same company, however offers the holder the potential upside of conversion into the equity while offering some downside protection through coupon payments and return of principal upon maturity. A holder can convert the bond into a specified number of shares of common stock or cash of equal value. The Pier 88 Investment Team views investment grade convertible bonds as an attractive risk/reward opportunity with competitive upside participation relative to the equity market. Per the chart below, the convertible index has maintained a higher Sharpe Ratio and greater current yield than the S&P 500 and Russell 2000 indices' dividend yield.[1]

Dec 2006 – Dec 2016	*Average Quarterly Return*	*Standard Deviation*	*Yield[2]*	*Sharpe Ratio*
BofA ML All Convertibles Index (VXA0)	1.94%	14.16%	3.62%	0.51
S&P 500 Index (SPX)	1.61%	15.78%	2.01%	0.38
Russell 2000 Index (RTY)	1.91%	19.65%	0.89%	0.36

Most convertible bonds reside in the capital structure with traditional fixed income securities. Since 2010, the convertible index referenced above has had over 90% correlation with the S&P

[1] Pier 88 / Bloomberg
[2] Bloomberg Yield, as of 8/23/2017

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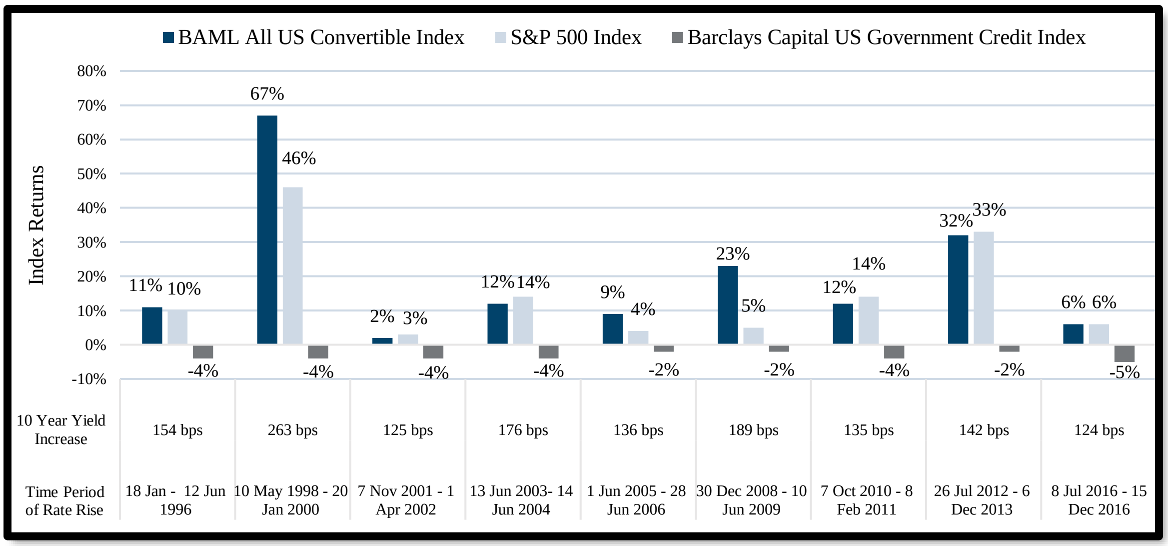
500, while offering better yield and holding a superior position in the capital structure. Convertible bonds have convexity through an embedded call option offering upside participation in market rallies and the bond floor providing protection in the event of a decline. In contrast to Treasuries, convertibles have performed exceptionally well in rising interest rate environments. The asset class did not experience negative returns during the past nine historical rate hikes.

Equity-Like Returns in Rising-Rate Environment[3]



As mentioned, convertible assets are a hybrid with both equity and fixed income characteristics and have often been overlooked in favor of high yield or equity allocations. Given its unique complexity, convertibles often trade at a discount to their fixed income counterparts. Currently, convertible bonds offer equity exposure with an average delta of 54%.[4] Delta measures the change in the convertible assets' price with respect to the change in the underlying common stock price. Delta usually increases as the underlying stock price increases and will move to 1.0 (or 100%) as the convertible becomes deep in the money. If a convertible asset trades at a 1.0 delta, the change in the convertible bond price becomes highly correlated to the change in the underlying stock price. Conversely, as the convertible assets move out of the money the delta will decline towards zero.

[3] Pier 88 / Bloomberg (Index Symbols: VXA0, SPX, LUGCTRUU)
[4] Pier 88 / Bloomberg, as of 8/23/2017

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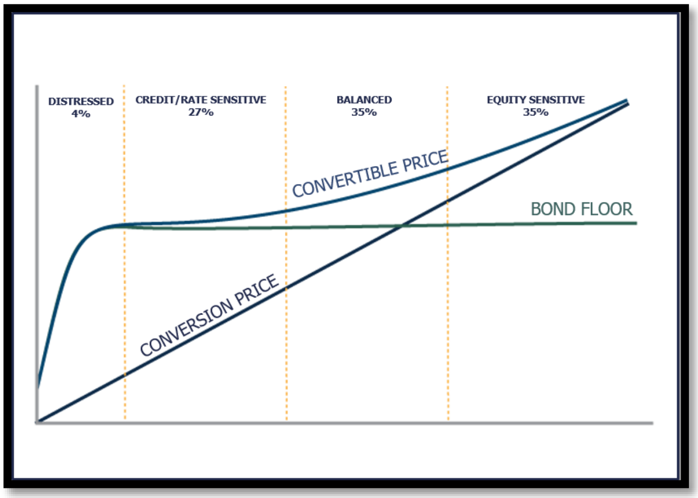
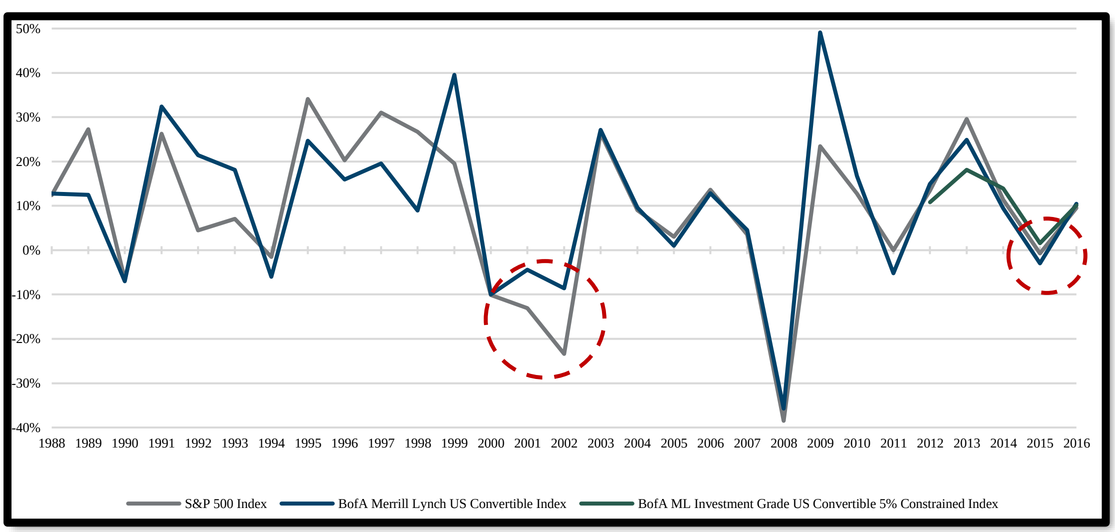
Return Pattern of a Convertible Bond



Maintaining an investment grade profile can minimize default risk. Looking at almost a century of historical default data, we believe high credit quality companies with a balanced convertible profile offer a better risk/reward relative to other asset classes. The following graph compares the performance of equities to convertible assets during periods of market volatility. The data illustrates how the convertible asset class outperformed equities during technology-driven market sell-off in 2002. Furthermore, the investment grade convertible index offered better downside protection during the January 2016 sell-off. Pier 88 posits that a portfolio consisting of investment grade convertible securities should behave similarly in the event of a market downturn.

Convertible Assets versus Equities (1988 – 2016)[5]



[5] Pier 88 / Bloomberg (Index Symbols: SPX, VXA0, VX5C)

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The investment grade convertible bond universe is well diversified across industry sectors, geographic regions and market caps. Well-known issuers include companies such as Intel, Priceline, Wells Fargo, Bank America, and Stanley Black & Decker. The total convertible market value size is approximately $308 billion with the following geographical breakdown: 61% US, 29% EMEA, and 10% APAC.[6] Currently, issuers are well distributed across large, mid and small cap. The most well represented sectors in the convertible universe are presently Technology, Healthcare, Financials, Real Estate, and Consumer Discretionary. Issuers in the investment grade convertibles market tend to have strong credit.

Balanced and Well Positioned for Current Macro Environment

Given the relatively benign macro environment with the specter of rising interest rates on the horizon, investment grade convertible securities offer a compelling opportunity. Pier 88 believes convertibles are positioned to benefit from rising inflation via equity market participation and short duration. Additionally, they can offer downside protection via seniority in the capital structure, investment grade credit quality and interest payments until maturity. The current average yield in this environment is far superior to Treasuries of the same duration.

Convertible securities outperform other fixed income securities during rising rate environments through two avenues. First, through the equity conversion optionality, convertible bonds are participatory interests in the real businesses. Second, the duration of convertible bonds are usually less than four years, on the shorter end of most fixed income assets.

The “Equity Lens” Approach

As convertible bonds are hybrid securities blending equities and debt, there are multiple approaches to managing convertible bonds. Some may focus on the credit aspects of the market, while others focus on the structure of a particular security. In this market our view is that the delta, or “equity sensitivity” of the security, is the primary driver of returns. As the charts below show, delta has driven most of the performance of convertible bonds, particularly in investment grade convertible bonds.

While credit research and understanding the structure of a convertible security is important, getting the investment call right on the underlying equity of an issuer is critical. Indeed, a review of the bond index confirms the importance of getting the stock call right. The following table shows that during the first six months of 2017, the top 10 performing securities in the Merrill Lynch Investment Grade Convertible Bond Index had 91% equity performance capture, while the bottom 10 performing securities only experienced 41% of the equity decline, elucidating the 2-to-1 asymmetric risk reward in the investment grade convertibles asset class.[7]

[6] Barclays Global Research, as of 7/26/2017
[7] Pier 88 / Bloomberg

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Top 10 Merrill Lynch Investment Grade Convertible Bond Index Performer[8]

Bond / Preferred (VX5C Index)	*Stock*	*Bond Performance*	*Stock Performance*
NVDA 1.000% 12/01/2018	NVDA	36%	35%
LRCX 2.625% 05/15/2041	LRCX	31%	34%
RHT 0.250% 10/01/2019	RHT	19%	37%
FNF 4.250% 08/15/2018	FNF	32%	32%
ANTM 2.750% 10/15/2018	ANTM	30%	31%
WFC 7.500% PERP	WFC	10%	1%
PCLN 1.000% 03/15/2018	PCLN	26%	28%
HCN 6.500% PERP	HCN	10%	12%
LRCX 1.250% 05/15/2018	LRCX	34%	34%
NEE 6.123% 09/01/2019	NEE	10%	17%
Mean		28%	31%
Median		24%	36%
Capture			91%

Bottom 10 Merrill Lynch Investment Grade Convertible Bond Index Performers[9]

Bond / Preferred	*Stock*	*Bond Performance*	*Stock Performance*
MIC 2.000% 10/01/2023	MIC	-2%	-4%
SLG 3.000% 10/15/2017	SLG	-2%	-2%
RPM 2.250% 12/15/2020	RPM	-1%	1%
D 6.3750% 07/01/2017	D	-5%	0%
NEM 1.625% 07/15/2017	NEM	-2%	-5%
INTC 2.950% 12/15/2035	INTC	-4%	-7%
SRC 3.750% 05/15/2021	SRC	-5%	-32%
SRC 2.875% 05/15/2019	SRC	-5%	-32%
MIC 2.875% 05/15/2019	MIC	-5%	-4%
INTC 3.750% 08/01/2039	INTC	-7%	-7%
Mean		-4%	-4%
Median		-4%	-9%
Capture			41%

As the above charts illustrate, there is a pronounced relationship between the convertible security and underlying equity performance. The data suggests that the equity sensitivity has driven the upside performance while the fixed income characteristics enabled superior performance on the downside.

[8] Pier 88 / Bloomberg, VX5C Index, constituents price change from 12/31/2016 – 6/30/2017
[9] Pier 88 / Bloomberg, VX5C Index, constituents price change from 12/31/2016 – 6/30/2017

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The case for an allocation to convertible bonds continues to be strong and the case for active management in this space even stronger. Employing a fundamental "equity lens" approach can uncover compelling investments in the current macroeconomic environment. Convertibles securities can also offer diversification to lower overall portfolio volatility. An investment grade convertible bond allocation may be a differentiated way for investors to achieve performance from the traditional fixed income and high dividend equity investment. Convertible bonds have traditionally outperformed in rising interest rate environments. Additionally, convertible coupons are contractually guaranteed providing a more dependable income stream compared to equity dividends. The bond "floor" or par value can also provide some downside protection for those equity investors who seek to be a little more conservative following a multi-year bull market run in equities.

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Disclosures

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Russell 2000 Index (RTY): The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. The Russell 2000 Index is a subset of the Russell 3000® Index representing approximately 8% of the total market capitalization of that index. It includes approximately 2,000 of the smallest securities based on a combination of their market cap and current index membership.

S&P 500 Index (SPX): The S&P 500 focuses on the large-cap sector of the market; however, since it includes a significant portion of the total value of the market, it also represents the market. Companies in the S&P 500 are considered leading companies in leading industries.

BofA Merrill Lynch Bond Indices (VXA0 / VX5C): Source BofA Merrill Lynch, used with permission. Source BofA Merrill Lynch, used with permission. BOFA Merrill Lynch is licensing the BOFA Merrill Lynch indices "As Is," makes no warranties regarding same, does not guarantee the suitability, quality, accuracy, timeliness, and/or completeness of the BOFA Merrill Lynch indices or any data included in, related to, or derived therefrom, assumes no liability in connection with their use, and does not sponsor, endorse or recommend Pier 88 Investment Partners LLC, or any of its products or services. The BofA Merrill Lynch All U.S. Convertibles Index (VXA0) measures the return of all U.S. convertibles. The BofA Merrill Lynch Investment Grade US Convertible 5% Constrained Index (VX5C) Index is a market capitalization-weighted index of domestic corporate convertible securities.

Bloomberg Barclays US Government/Credit Bond Index: The Bloomberg Barclays US Government/Credit Bond Index is a broad-based flagship benchmark that measures the non-securitized component of the US Aggregate Index. It includes investment grade, US dollar-denominated, fixed-rate Treasuries, government related and corporate securities.

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