INCOME RESEARCH + MANAGEMENT

IR+M UPDATE
CORE PLUS

October 30, 2017

Persistently low yields and tight spreads have driven fixed income investors to consider opportunities with higher return potential relative to traditional Core products. As a result, Core Plus strategies have drawn notable interest. While there may be merit to expanding the core fixed income toolkit, it is critical to recognize the heterogeneity of the plus universe and, consequently, the variety of Core Plus products offered. Plus sectors can have materially different risk-return profiles, and we believe a firm understanding of these characteristics is necessary to properly identify products that can meet investor objectives.

What is in the Plus Bucket?

Core Plus products are typically benchmarked against the Bloomberg Barclays US Aggregate Index, but the plus universe is composed of several out-of-benchmark sectors. Historically, the performance and volatility of these sectors has varied over different market cycles. Investors with lower risk appetites and a need for steady income growth, like defined contribution plans, may prefer lower risk-return plus sectors, while other investors who can withstand more dramatic market moves might favor a more volatile approach with greater upside potential. Additionally, it is important to consider correlations as some sectors may provide diversification benefits in the context of an investor's entire portfolio, while other sectors may do the opposite and amplify existing exposures.

Common Plus Sectors[1]

+ High-yield corporate bonds
+ Bank loans
+ Emerging market debt (EMD)
+ Emerging market (EM) currency
+ Non-agency mortgage-backed securities (MBS)
+ Derivatives
+ Preferreds
+ Convertibles

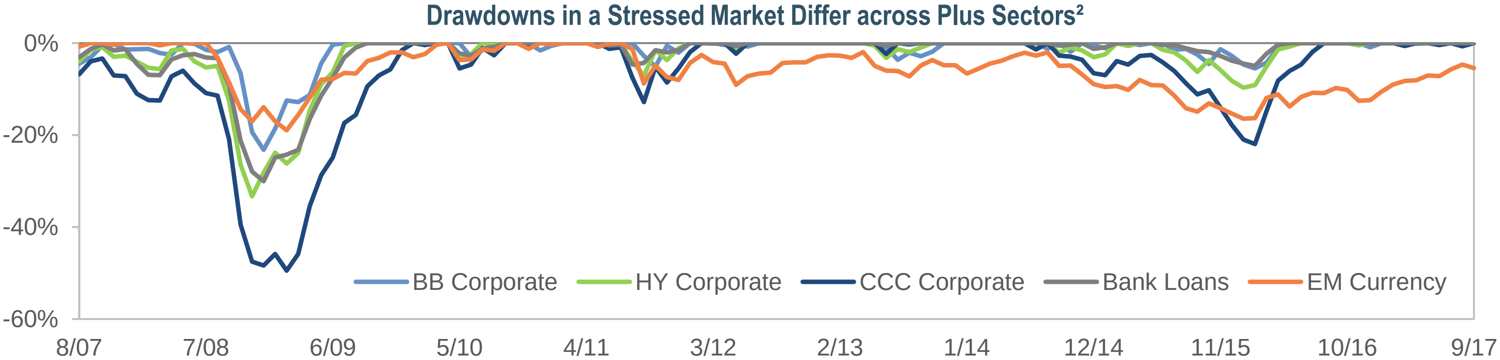
Performance across Plus Sectors has Varied since 2000

As of 9/30/17	EMD (Hard Currency)	BB Corporate	High Yield Corporate	CCC Corporate	B Corporate	Bank Loans	EM Currency
Annualized Return[2]	9.4%	7.9%	7.4%	6.8%	6.3%	4.9%	3.9%
Annualized Standard Deviation[2]	8.2%	7.4%	9.5%	14.7%	9.4%	6.2%	6.5%
Correlation with BloomBarc Aggregate Index[2]	0.56	0.26	0.17	0.03	0.14	-0.03	0.19
Correlation with S&P500[2]	0.50	0.59	0.64	0.63	0.62	0.47	0.60
9/30/17 Universe Size ($bn)[3]	899[4]	597	1,348	199	533	278[5]	N/A

EMD (Hard Currency): J.P. Morgan EMBI Global Diversified Composite. BB Corporate: BloomBarc US BB Corporate Index. High Yield Corporate: BloomBarc US Corporate High Yield Index. CCC Corporate: BloomBarc US CCC Corporate Index. B Corporate: BloomBarc US B Corporate Index. Bank Loans: S&P/LSTA Leveraged Loan Total Return Index. EM Currency: MSCI Emerging Markets Currency Index.

The chart below illustrates the performance of several plus sectors since the global financial crisis. Most asset classes experienced severe negative drawdowns, but to varying degrees. Prices on CCC corporate bonds dropped nearly 50% and took 26 months to recover that lost value, while BB corporates fell roughly 23%.[2] Emerging market currencies fared better at the outset of the crash, but did not rebound as well as others, and the MSCI Emerging Market Currency Index, which is used as a currency proxy, has yet to recover its losses since reaching the trough in February 2009.[2]

Drawdowns in a Stressed Market Differ across Plus Sectors[2]



[1]Common to the industry. [2]Bloomberg. [3]Bloomberg Barclays. [4]J.P. Morgan. [5]S&P/LSTA. The views contained in this report are those of IR+M and are based on information obtained by IR+M from sources that are believed to be reliable. This report is for informational purposes only and is not intended to provide specific advice, recommendations for, or projected returns of any particular IR+M product. No part of this material may be reproduced in any form, or referred to in any other publication, without express written permission from Income Research & Management.

BB-Rated Corporates

One area of the Core Plus universe that has historically performed well on a risk-adjusted basis is the BB corporate space. Many investors who favor BB corporates often highlight fallen angels as an opportunity to add value. Fallen angels are credits that have been downgraded from investment grade to high yield. Frequently, this prompts selling by investors unable to hold high-yield bonds, which consequently provides high-yield investors an opportunity to buy on temporarily weak market technicals. Another potential explanation for the relative outperformance of BB corporates is the low default rate. Over the past century, the BB corporate annual default rate is 1.03% versus 0.27% for BBBs, 3.19% for Bs, and 10.54% for CCC-C.[6]

Historically BB Corporate Sharpe Ratios* Look Relatively Attractive[7]
(Bloomberg Barclays Indices as of 9/30/17)

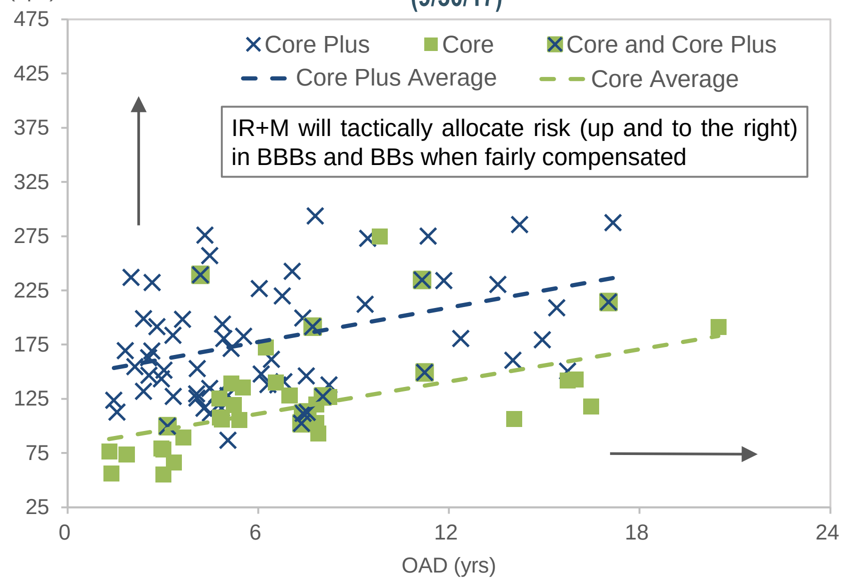
	IG Corporate	HY Corporate	BB Corporate	B Corporate	CCC Corporate
1 Year	0.43	3.33	3.04	3.12	3.08
3 Year	0.97	0.96	1.30	0.79	0.63
5 Year	0.81	1.18	1.34	1.06	0.93
7 Year	1.08	1.22	1.43	1.17	0.93
10 Year	0.87	0.69	0.94	0.58	0.44
15 Year	0.74	0.88	1.03	0.78	0.74
20 Year	0.71	0.51	0.76	0.40	0.26

*Sharpe Ratio: Return over risk-free rate per unit of total risk.
[(Index return) – (Risk-free rate)] / (Index standard deviation)

IR+M Core Plus Strategy

The IR+M Core Plus strategy currently invests in some, but not all, of the aforementioned plus sectors. Relative to the universe, IR+M utilizes a more conservative approach and emphasizes transparency. We focus on high-yield corporates (particularly BB-rated issues), preferreds, and non-agency mortgage-backed securities (MBS). In addition to these sectors, we also use many best ideas from our Core strategy, particularly those further out on the risk spectrum. In relatively tight spread environments, positioning of the Core Plus strategy will reflect a modest risk posture, which would be thematically consistent with IR+M's other broad strategies. Conversely, in periods of attractive valuations, we would expect a more elevated risk profile.

IR+M Core and Core Plus BBB and BB Corporate Holdings[8] (9/30/17)



IR+M Core Plus Differentiators

- + Focus on transparency
- + Plus sector allocation is an extension of our existing, bottom-up security selection process
- + Strategically allocate to plus sectors based on relative value – not a constant overweight
- + Not all BBBs are created equal – different approach in Core and Core Plus strategies

With low Treasury rates and credit spreads at post-crisis tights, giving fixed income managers more flexibility to achieve higher returns might be prudent. A less constrained manager might be appropriate for an investor with a higher risk tolerance. At IR+M, we believe that our Core Plus product is a suitable alternative for those investors seeking higher yields while maintaining steady growth and adding modest additional risk.

[6]Moody's. [7]Bloomberg Barclays; darker green indicates higher sharpe ratio for given time period. [8]Representative portfolio holdings as of 9/30/17. Some statistics require assumptions for calculations which can be disclosed upon request. A similar analysis can be provided for any portfolio we manage. The views contained in this report are those of IR+M and are based on information obtained by IR+M from sources that are believed to be reliable. This report is for informational purposes only and is not intended to provide specific advice, recommendations for, or projected returns of any particular IR+M product.