CIBC Asset Management

INSTITUTIONAL

HIGH YIELD—CAN'T GET NO RESPECT

CARLO DILALLA, CFA,
Vice-President & Senior Client Portfolio Manager – Fixed Income

Executive Summary

The use of high yield in portfolio construction has suffered greatly as a result of high yield's 'completion market' nature. It continues to be the Rodney Dangerfield of asset classes—it just doesn't get the respect it deserves—resulting in missed opportunities for institutional investors. High-yield markets have come a long way from their infancy and, in the context of increased alternatives use, it is now time to consider this asset class as part of an institutional portfolio.

To make our case, we address three questions:

1 WHY HAVEN'T INSTITUTIONAL INVESTORS FOCUSED ON HIGH YIELD?

Over the years, high yield has transitioned from a LBO and fallen angel-dominant market to a stable source of financing for companies looking to target balance sheet efficiency in support of their strategic long-term growth plans. We consider the natural bifurcation in high-yield markets that include everything from recently downgraded BBB companies to those on the verge of default. This heterogeneous market makes it difficult for institutional investors and consultants to find the 'natural home' within the total portfolio context. Add to the equation a heterogeneous collection of high-yield managers (from quality bias in BB/B rated bonds to distressed debt managers), it is clear why high yield has languished as a consistent allocation in portfolios. We also argue that, due to the inefficient and broad nature of high-yield markets, active management is paramount as passive portfolios expose clients to a wide swath of unintended risks.

2 WHY ALLOCATE TO HIGH YIELD TODAY?

Like most investments, where we see inefficiency is also where we believe clients can extract the most value. The impact of adding high yield to portfolios is explored, along with the improvement to the risk/reward profile for clients. Also, many may be surprised by how well this fixed income asset class performs in a rising rate environment. Further, in the context of expanding portfolios to capture income streams, high yield offers 'a more liquid' option for those down the path of growing their alternatives allocations. We also explore the benefit of utilizing high yield as an equity replacement for those plans beginning their de-risking journeys.

3 HOW DOES HIGH YIELD FIT INTO AN INSTITUTIONAL PORTFOLIO?

Due to high yield's hybrid nature, we believe high yield can fit on both the return-seeking and liability hedging side of a pension plan's portfolio. We also believe that this makes high yield an attractive asset class to utilize when transitioning equity exposures to the liability hedging portfolio.

We believe the misconceptions of this asset class and categorization reflect an outdated market view. Compared to traditional exposures, high yield provides attractive returns without the illiquidity associated with many alternative holdings. Ignoring the important role that high yield can play in pension, foundation and insurance portfolios can result in missed opportunities.

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In terms of portfolio construction, high yield continues to be the Rodney Dangerfield of asset classes[1]. Look at the terms often applied to this market: 'junk', 'risky' and 'speculative grade'. We believe these types of categorizations reflect an outdated market view. In this paper, we aim to answer three questions:

- Why haven't institutional investors focused on high yield?
- Why allocate to high yield today?
- How does high yield fit into an institutional portfolio?

We will show that high-yield markets have come a long way from their infancy. They have suffered from categorization issues due to their tumultuous history and the divided nature of these markets. We will also discuss how high yield can optimally fit into an institutional investor's portfolio.

What is a High-Yield Security?

Credit rating agencies rate the public debt issues of corporations on a scale from AAA to D. AAA is reserved for (nearly) risk-free bonds and D for those in default. Credit worthiness is based on the financial and business risks of the firm. The scale system is illustrated in Figure 1. The universe is split into two separate groups—investment grade (or high grade) and high yield (or below investment grade). The BBB/BB ratings threshold separates these categories. In our discussions, we will focus on the securities that are rated BB and below, which represent the high-yield universe.

FIGURE 1 – RATINGS SCALE

	MOODY'S	S&P	FITCH
Investment Grade			
Highest	AAA	AAA	AAA
	AA	AA	AA
	A	A	A
	BAA	BBB	BBB
High Yield			
Lowest	BA	BB	BB
	B	B	B
	CAA	CCC	CCC

Source: Standard & Poor's, Moody's and Fitch Ratings as at September 20, 2016

Why Haven't Institutional Investors Focused on High Yield?

We see two main reasons why high yield does not garner the interest it deserves as an asset allocation decision in the Canadian institutional market. High yield is plagued by a checkered past, which has not been correctly revised. As well, the asset class
is difficult to classify within a total portfolio context, lending itself to be easily ignored within an institutional investor's opportunity set.

[1] For our younger readers, Rodney Dangerfield was a stand-up comedian and actor famous for the catchphrase "I can't get no respect".

The Genesis of a Completion Market and a Brief History Recap

In the beginning, high yield was simply made up of the bonds of companies that had once carried investment-grade ratings but, for one reason or another, had been downgraded to below-investment grade (known as 'fallen angels'). This led to the 'junk bond' moniker associated with below-investment grade bonds, as they represented unwanted paper that few people would invest in. This characteristic also made high yield a 'catch-all' or 'completion market' that encompassed all types of securities, from a recent 'fallen angel' that, in many respects, still carried investment-grade quality, to companies on the verge of default. This wide breadth of issuer-quality types made the high-yield market much harder to understand compared to a more homogenous universe, such as investment-grade credit. For investment-grade credit, the incremental credit risk, yield and general risk characteristic differences are much smaller moving from one rating bucket to another (AAA/AA to BBB) versus high yield (BB all the way to default). Such a heterogeneous collection of securities in high yield makes it hard to assess the asset class in a consistent way.

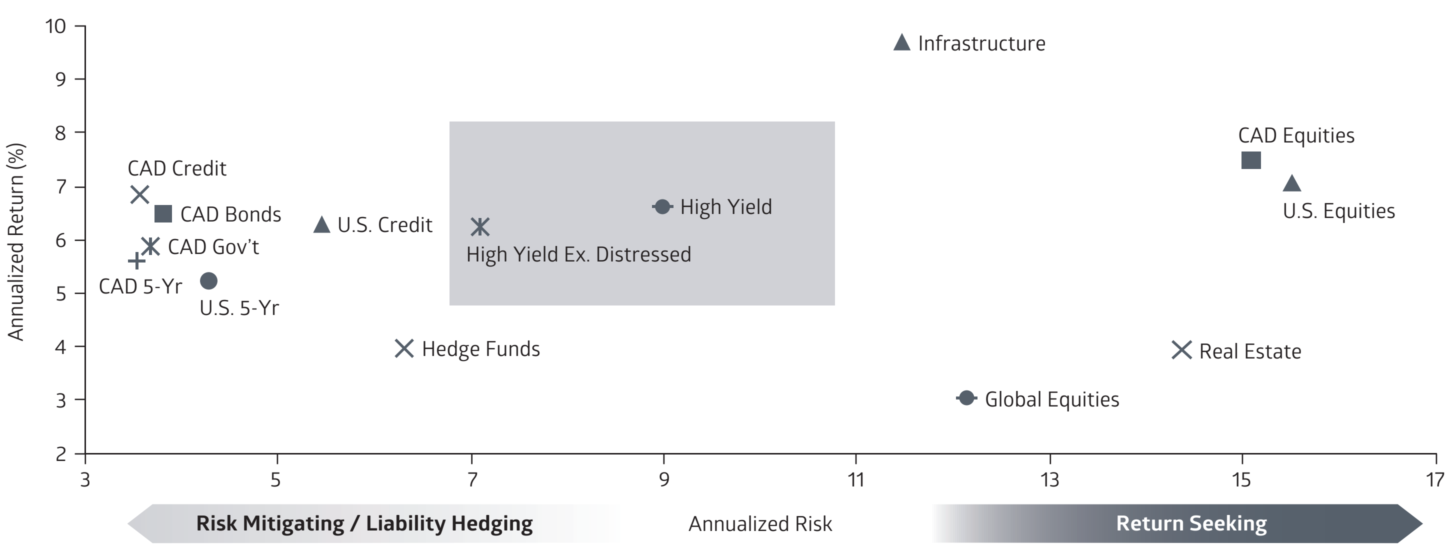
In the 1980s, the nature of the players in the market changed, thanks to Michael Milken, an employee of Drexel Burnham, who focused on high-yield research and trading. Milken realized the relative value of high-yield bonds as attractive investments, making a market for institutional clients, and later using the high-yield bond as a tool to finance the leveraged buyout (LBO). This process involved issuing high-yield debt to acquire a target company—the most famous instance was the bid for RJR Nabisco documented in the famous account 'Barbarians at the Gate'. The Milken period was defined by aggressive lending standards, with an openness to leveraging the target's balance sheet to risky levels. The acquirer relied on a very specific series of events for the target company to successfully pay down this debt post-acquisition. It doesn't help that Milken was later indicted on racketeering and fraud charges, leaving a further black eye on the industry. With such a checkered past, it is no wonder that institutional investors have not paid significant attention to high yield.

Looking For a Home Within the Traditional Asset Mix

Another challenge to including high yield in asset allocation decisions is its 'completion market' nature, made up of a disparate variety of bond and issuer types. The only consistent characteristic of this market is that the issuer carries a rating below BBB. Set aside the fact that we often disagree with the ratings agencies' assessment of issuer risk (i.e. there are many issuers that exhibit investment-grade quality, according to our internal ratings process, but are rated high yield) which means defining a market by a rating agency metric alone may not be ideal.

The risk-return profile of high yield makes it hard for institutional investors and retail investors to classify this investment within their portfolios. High-yield securities are hybrid in nature, as illustrated by their lack of natural home on the risk-return spectrum. In Figure 2, we plot the 20-year annualized return-versus-risk for a wide array of asset classes. Most of the asset classes represented are (somewhat) easy to categorize, based on the risk-mitigating and return-seeking spectrum within which institutional investors often apportion their portfolios. However, high yield sits between these two categories, producing a historical return that some deem too low to be considered return-seeking and others a risk too high to be considered risk-mitigating.

FIGURE 2 – HIGH YIELD ALONG THE RISK-RETURN SPECTRUM



Source: Thomson Reuters Datastream, BofA Merrill Lynch, Barclays, eVestment
Please see disclaimer for list of indices used

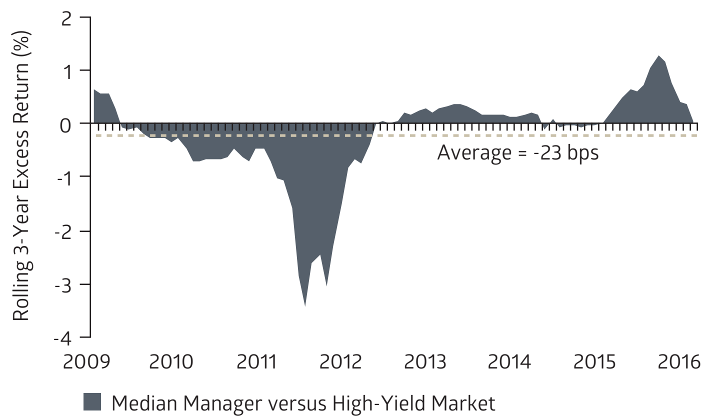
High yield has no natural categorization for plan sponsors and consultants. This is not unlike the challenges that faced alternative asset classes 10 years ago. Its classification problem translates into a difficult asset class to recommend for consultants and plan sponsors. Below we define a general 'recommendation formula' for any given asset class:

Homogenous Universe
+ Consistent Outperformance of a Benchmark
+ Well-Defined Role in Total Portfolio

= **Recommendation for Asset Mix**

Most traditional asset classes fulfill each of the above requirements in the recommendation formula. However, categories such as alternatives and high yield do not. This is because the high-yield manager universe is also heterogeneous, much like the market itself. Some high-yield strategies in peer universes hold investment-grade debt, distressed credit, loans and even hybrid securities, such as preferred shares. An additional layer of complexity arises when considering managers who hedge currency risk versus others who do not, which has a significant impact for non-USD investors, especially in today's ultra-low yield environment. Attempts to create a homogeneous universe of high-yield managers is difficult due to the wide breadth of options available. It is no wonder that the median high-yield manager has trouble consistently beating the standard high-yield benchmark, considering the amount of variance that is possible, in terms of securities held and strategies employed, as shown in Figure 3. We believe this persistent underperformance is less a function of poor active management and more symptomatic of the 'catch-all' nature of the broad market benchmark versus managers who focus their efforts into subsets of the asset class. This is an issue that managers in the alternatives categories face as well. The first goal of most high-yield managers is to build a sustainable portfolio of securities. This goal can come at the expense of missing rallies in lower-quality securities and underperforming the market at certain times in the credit cycle.

FIGURE 3 – HISTORY OF UNDERPERFORMANCE



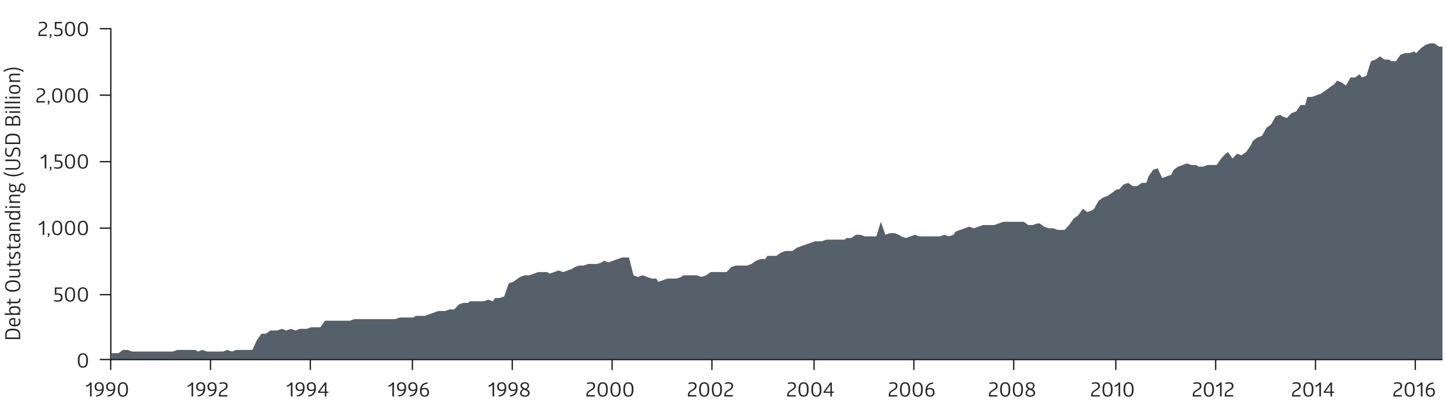
Source: BofA Merrill Lynch, eVestment, Median Manager of eA High Yield Universe for period ending June 30, 2016

As mentioned, the divided nature of this market means that active management is of paramount importance. Passive exposure to the broad market opens investors to participation in higher inefficiencies as compared to more common asset classes, such as investment-grade debt or equities. A passive approach to high yield can be a dangerous proposition with unintended exposures introduced to the portfolio. In contrast, an active manager can tell institutional investors exactly what section of the market they are invested in and where they are exploiting the inefficiencies offered.

With these issues hanging over high-yield markets, it is easy to see why the asset class does not have an 'easy-to-place' role within traditional asset mixes. Despite all the forces working against high yield, the market has grown exponentially over the last few decades, as shown in Figure 4.

Next, we turn to the characteristics of today's high-yield market to show how much it has evolved from its checkered past. It has now grown into a viable market opportunity for institutional investors.

FIGURE 4 – STILL GROWING



Source: Barclays, as at June 30th 2016

FIGURE 5 – CREDIT METRICS THEN AND NOW (EX. FINANCIALS)

2009

	Interest Coverage		Debt Level / Leverage	
	EBITA / Interest Expense	(FFO + Int. Exp.) / Int. Exp.	Debt / EBITDA	Debt / Book Capitalization
AAA	18.6	17.8	0.9	30.2%
AA	5.5	10.1	2.1	43.4%
A	6.6	8.9	2.0	44.7%
BBB	4.4	5.8	2.8	50.6%
BB	3.2	4.6	3.2	54.3%
B	1.4	2.4	5.3	74.9%
CCC – C	0.3	1.2	7.7	103.9%

2014

	Interest Coverage		Debt Level / Leverage	
	EBITA / Interest Expense	(FFO + Int. Exp.) / Int. Exp.	Debt / EBITDA	Debt / Book Capitalization
AAA	35.7	36.0	0.9	23.7%
AA	21.1	21.1	1.3	41.1%
A	13.4	13.8	1.6	39.3%
BBB	7.2	8.4	2.5	45.8%
BB	3.8	5.3	3.4	50.1%
B	1.7	3.1	5.1	67.3%
CCC – C	0.8	1.4	7.7	99.1%

Source: Moody's 'Financial Metrics Key Ratios by Rating and Industry for Global Non-Financial Corporations: December 2014'
Note: EBITA = Earnings before interest, taxes and amortization. FFO = Funds from operations. EBITDA = Earnings before interest, tax, depreciation and amortization. Book Capitalization = Short-term debt, long-term debt, deferred taxes, minority interest and book equity as at June 30, 2016

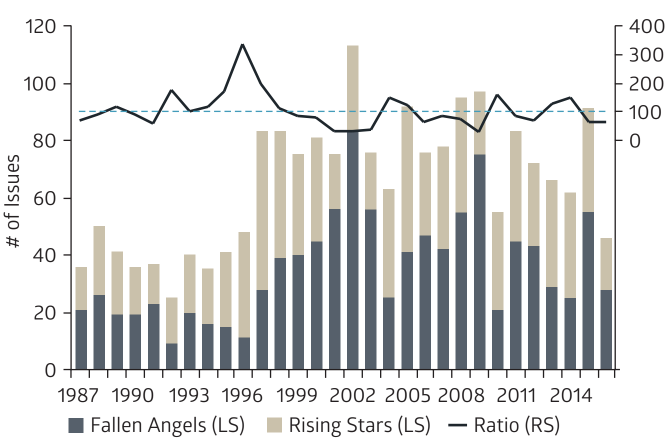
Why Allocate to High Yield Today?

Many factors that came to define high yield in the past and pushed serious investors away from the market no longer exist. The market still exhibits a wide swath of issuer-quality types, from recently downgraded to distressed, but it also is beginning to cultivate a consistent 'middle ground' of regular issuers. This section of the market includes stable issuers looking to maximize balance sheet efficiency that is consistent with their long-term growth strategy. In today's low-interest rate environment, this means there are many companies that actively target the high-yield market to finance their debt without impeding their ability to service that debt. Comparing credit metrics for these companies shows that they have been able to successfully maintain their credit quality and coverage ratios over time despite being rated below-investment grade, as shown in Figure 5.

The stable or improving credit metrics of high-yield issuers show that this is no longer simply the realm of investment-grade issuers who have fallen on hard times. A look at the proportion of 'rising stars' versus 'fallen angels' also shows that the high-yield asset class has come a long way from its initial 'junk bond' status. As illustrated in Figure 6, in any given year, we see more companies migrating up the quality spectrum versus those falling further down the scale.

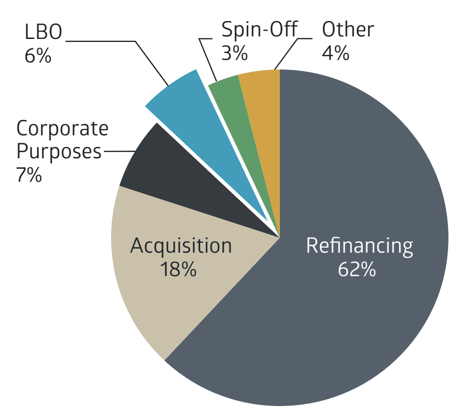
The purpose of high-yield issuance has also changed from the LBO-driven days of Milken. Figure 7 shows that refinancing activities now dominate the purpose for high-yield issuance, well above those issuing for purposes of conducting LBOs. In the first half of 2016, we saw 62% of total issuance resulting from refinancing and only 6% issued for LBO purposes. The increase in refinancing activity suggests that the high-yield market is not simply the realm of corporate raiders leveraging the balance sheets of target companies. Instead, viable companies are issuing and rolling over their debt comfortably within the high-yield space. Active managers can monitor these metrics and adjust their portfolios when LBO activity dominates new issuance. Passive investors would not be protected against this possibility.

FIGURE 6 – FROM FALLEN ANGELS TO RISING STARS



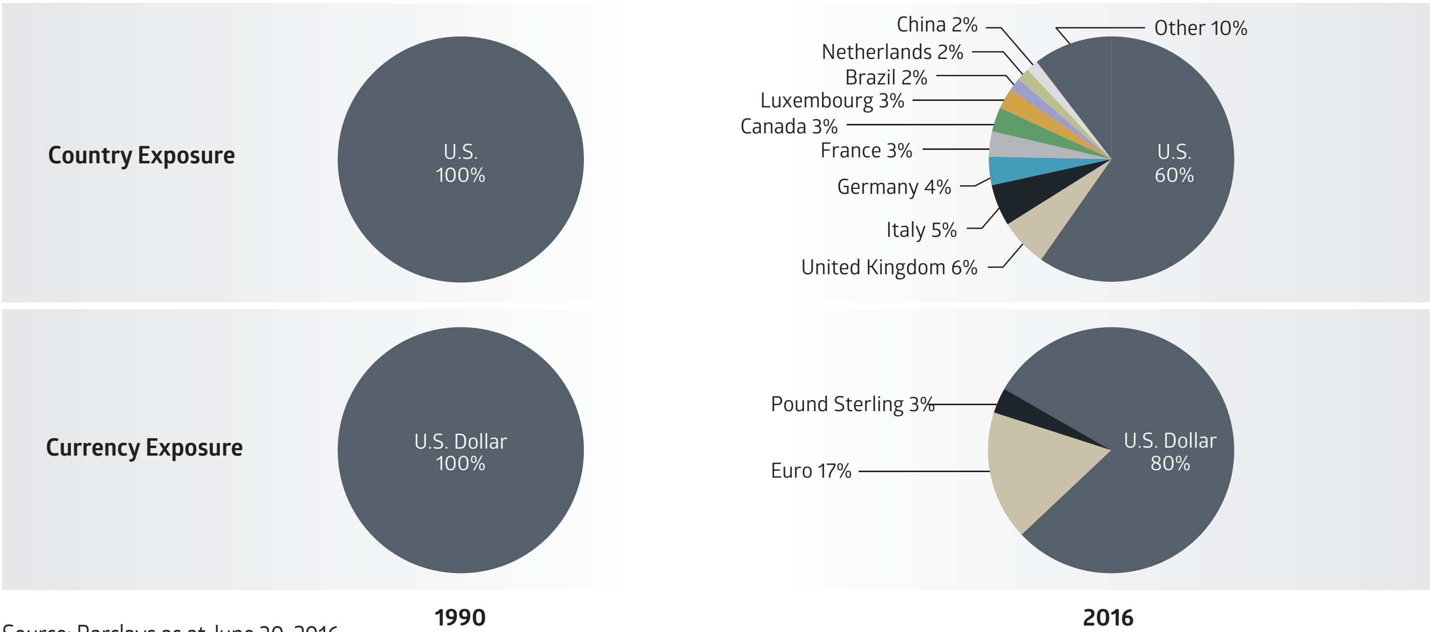
Source: BofA Merill Lynch as at June 30, 2016

FIGURE 7 – NOT JUST A LBO MARKET ANYMORE



Source: Stanadard & Poor's as at June 30, 2016.

FIGURE 8 – GOING GLOBAL



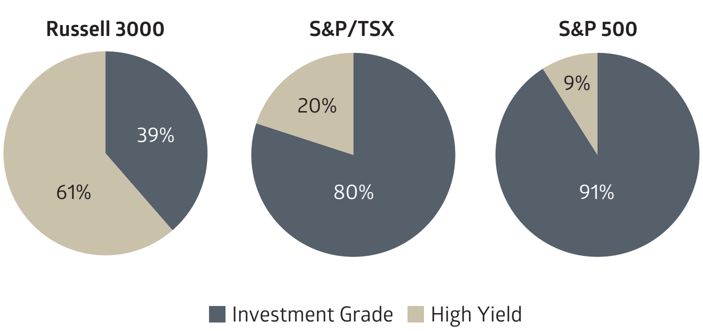
Source: Barclays as at June 30, 2016

The attractiveness of this space has also translated into a wider swath of global companies tapping the market versus the past. Comparing the 1990 period versus current market composition shows the trend toward a more diversified issuer base, as illustrated in Figure 8. The U.S. markets have always been deep enough to absorb and distribute high-yield issues. Historically, this has been the only way that high-yield companies could raise public debt. After the credit crisis, a European high-yield market emerged within the global high-yield asset class. Still, to this day, high-yield companies globally will mostly come to the U.S. market to finance their debt needs and, therefore, issue in U.S. dollars. This is another unique feature of the high-yield market. No other market has a central source of issuance, making the U.S. market a true global meeting place.

A Risky Misconception

Despite all these positive trends (which should prompt institutional attention), we often hear from investors that high yield is too risky and default probabilities too high for consideration. We believe this thinking is more a reflection of bygone periods than today's market reality. We also find that many of the names that we, as high-yield managers, hold in our portfolios are also held by our clients in the form of equity positions. An analysis of rated equity index constituents shows that significant percentages of the names clients hold in equity form are also high-yield bond issuers, as illustrated in Figure 9. While more specific indices such as the S&P 500 and S&P/TSX hold 9% and 20% exposure, respectively, to high-yield issuers, a broader index such as the Russell 3000 has a majority of issuers (61%) that are considered high yield.

FIGURE 9 – MORE FAMILIAR THAN YOU MIGHT THINK



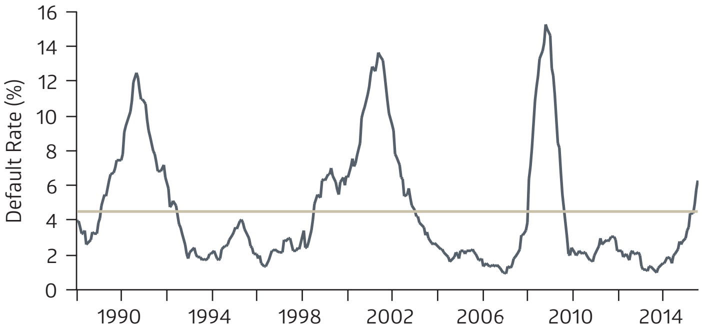
Source: Bloomberg as at June 30, 2016

If institutional investors are comfortable holding equity positions in certain names, they should be even more comfortable holding debt positions in the same issuer. Corporate debt, including high yield, offers a more senior claim on a firm's assets than equity because it sits higher in the capital structure. Equity positions can go to zero, with little to no residual value post-bankruptcy. Holders of high-yield paper may experience defaults but also have a higher probability of recovering some value post-bankruptcy due to its seniority in the capital structure.

Default probabilities are still relatively low in the high-yield market, even with the more recent energy turmoil and an increase in energy-related company defaults. The long-run average for high-yield default rates is still only 4.5%, as shown in Figure 10, with periods where the default rate hits much lower levels.

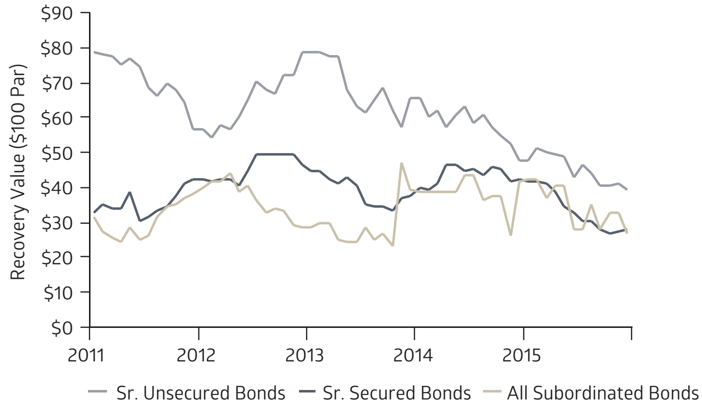
In Figure 11, we break down the historical default rates by credit-rating bucket to see where the majority of defaults occur on an annual basis. As would be expected, the overwhelming majority of defaults occur in the CCC/C rated issuers. BB/B rated issuers still remain remote from default. The dispersion across ratings buckets is pronounced, with a 1% average default rate for BB rated bonds, 4.5% for B rated bonds and jumping to 24% for CCC/C rated bonds. This has enormous implications for our thesis. First, active managers, with a quality bias, can avoid bonds

FIGURE 10 – THE LONG-RUN DEFAULT RATES



Source: BofA Merrill Lynch as at June 30, 2016

FIGURE 12 – STABLE RECOVERY RATES



Source: BofA Merrill Lynch for period ending December 31, 2015

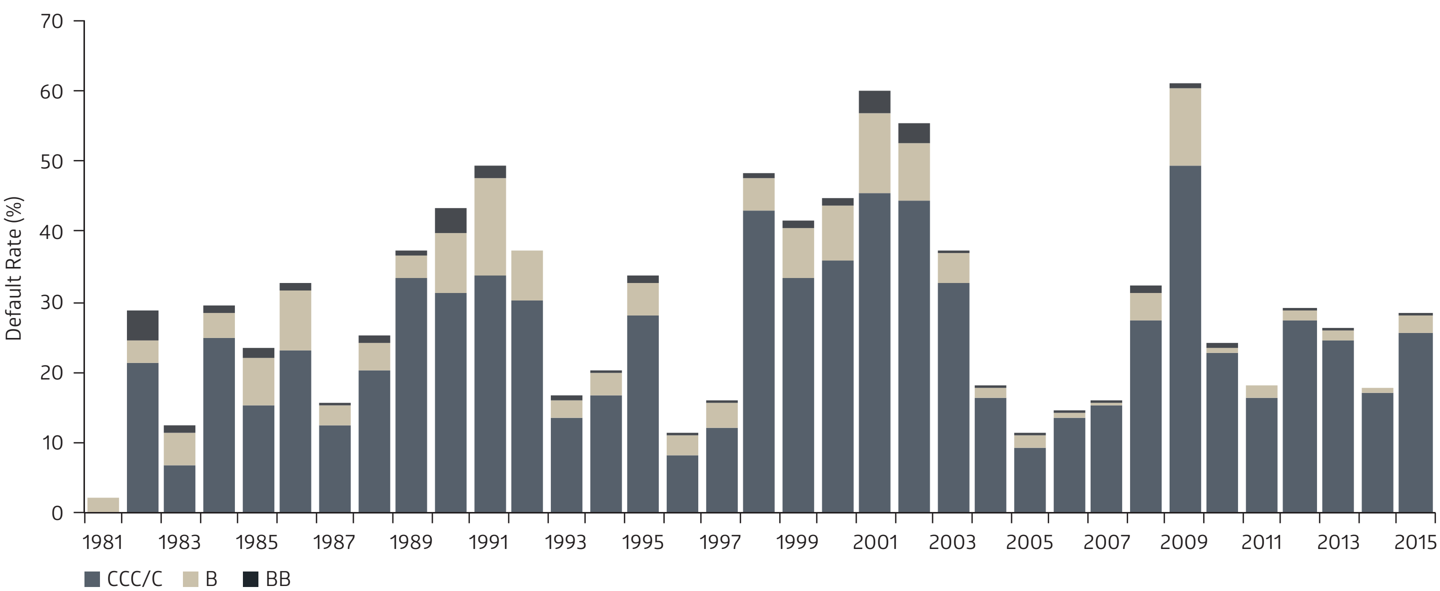
that are on the path to default. Second, the active manager is still judged against a benchmark that holds highly distressed securities, distorting traditional asset manager metrics against the benchmark.

For those high-yield bonds that do fall into default, recovery rates have been fairly steady, averaging 62 cents to 34 cents on the dollar, depending on the seniority of the bonds held, as illustrated in Figure 12.

What becomes clear from the default series pictured in Figure 11 is that it is hard to create a homogeneous picture of the market. This leads us to how we believe plan sponsors and asset managers need to view the high-yield universe.

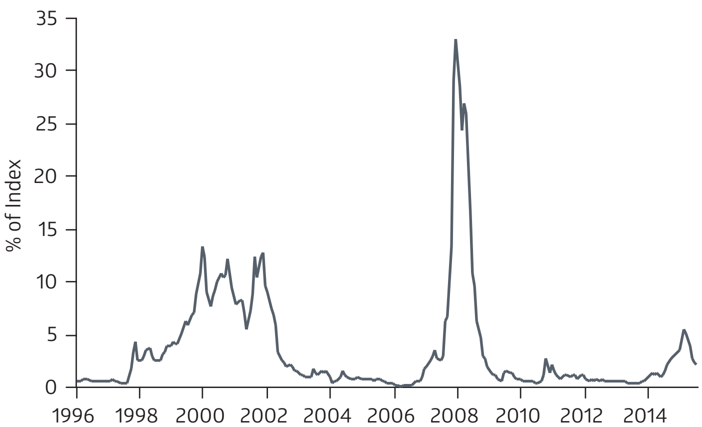
A substantial portion of the high-yield managers' alpha production stems from their ability to identify misrated securities and exploit the inefficiency of the ratings agencies. In this respect, ratings agencies are not always the best barometer for measuring the quality of an issuer. At the time of this writing, Teck Resources was rated BB, B and CCC by three different ratings agencies. This indicates that Teck Resources is either on its way to investment-grade status or on its way to default. This confusion highlights yet another reason for why active management is essential in this asset class. Other measures of determining 'quality' securities versus higher risk issues includes delineating between distressed and non-distressed debt, treating this line as the 'quality' divide. One way to define distressed credit is to include issues yielding over 20% on a yield-to-maturity basis. We readily acknowledge this is a blunt tool with which to define distressed credit. However, from a high level, it provides insight into the composition of the market without diving into the fundamentals of each constituent. Except for periods of abnormal stress, distressed credit makes up a smaller amount of the high-yield market than something like the 'junk bond' moniker would suggest, averaging 3.5% of the index over the period highlighted (Figure 13).

FIGURE 11 – A CLOSER LOOK AT WHO DEFAULTS



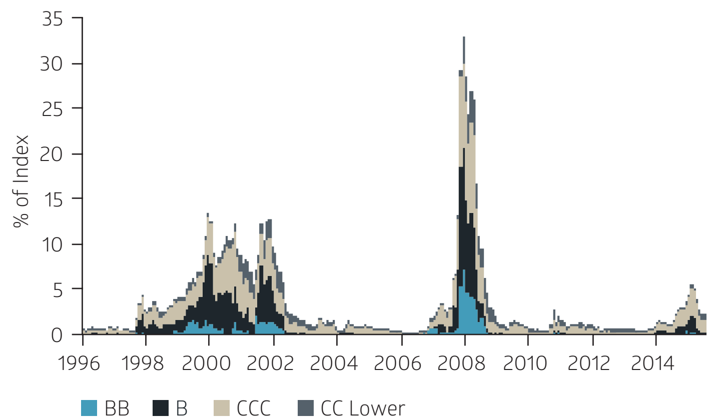
Source: BofA Merill Lynch as at June 30, 2016

FIGURE 13 – DISTRESSED DEBT AS A PERCENTAGE OF THE HIGH-YIELD MARKET



Source: BofA Merrill Lynch for period ending June 30, 2016

FIGURE 14 – DISTRESSED DEBT AS PERCENTAGE OF THE HIGH-YIELD MARKET BY RATING



Source: BofA Merrill Lynch for period ending June 30, 2016

For a more granular look, Figure 14 shows this same distressed sub-market broken out by ratings. As expected, CCC rated bonds dominate as a percentage of the distressed market, averaging 1.6% of the entire market (distressed and non-distressed) over the period. More importantly, the overall level of distressed as a percentage of the high-yield market is still relatively low. A focus on high quality means managers may miss significant rallies in risk assets, such as distressed credit.

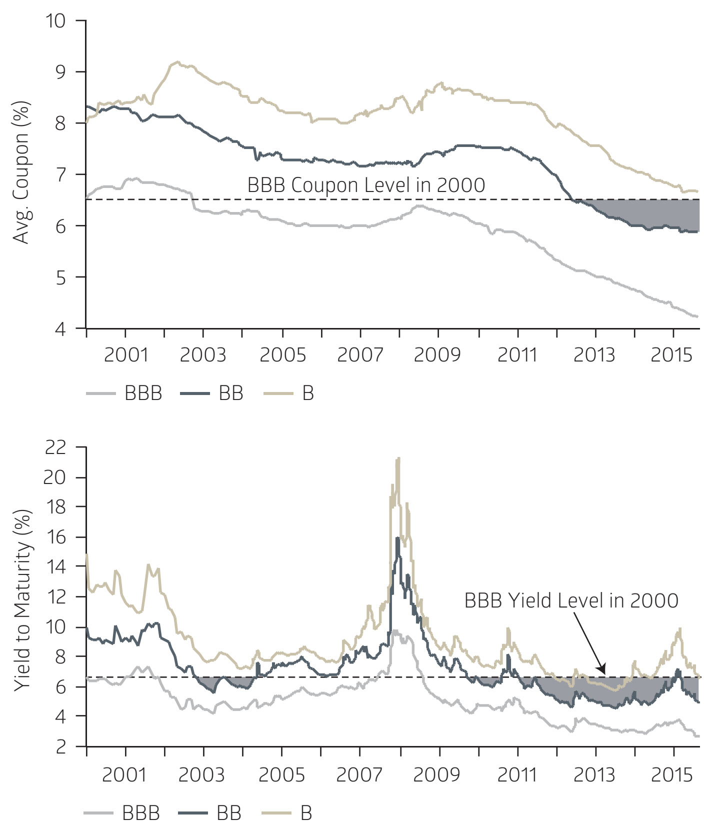
Beyond defaults and distressed situations, the current low-yield environment has pushed the entire debt market complex downward, in terms of coupon and yield levels. What was once the realm of investment-grade issuers is now being occupied by high yield. Figure 15 highlights this shift as BB and even B rated bonds now come to market with coupons and yields at or below historical BBB levels.

This lower coupon level means high-yield issuers are financing their operations at what used to be investment-grade rates. Given how important the cost of financing is to the health of a company, it can be argued that, given this lower financing cost, future default rates could be lower than historical default rates. If you believe, as we do, that interest rates will stay lower for an extended period of time, the threat of high-yield companies refinancing into higher rate environments is low. This is yet another argument that the negative assumptions about the high-yield asset class may be out of date.

A Divided Market That Can Be Exploited

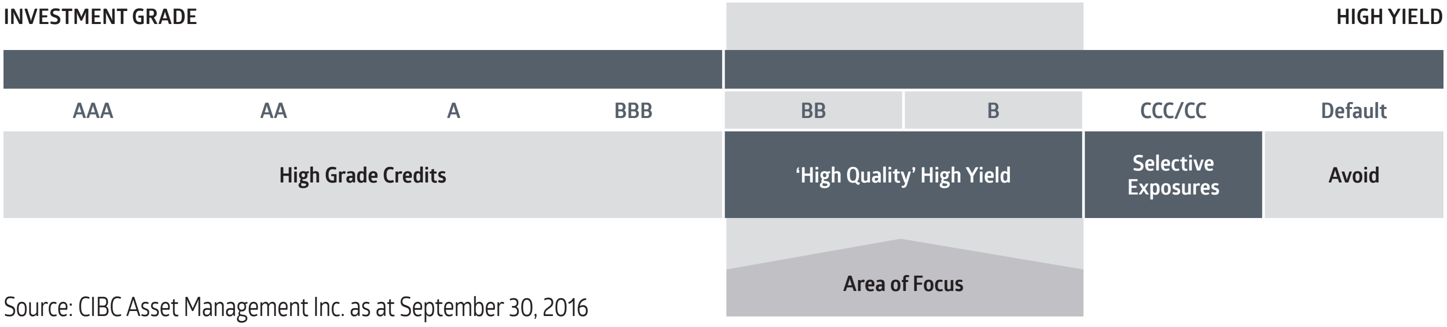
High-yield issuers across ratings buckets exhibit a wide dispersion of characteristics in terms of default probability and credit quality. Therefore, clients and their managers need to recognize that high yield is a divided market that requires specific focus on either the distressed section of the market or on expressing a 'quality bias' within a BB and B tilted portfolio. In our view, a BB/B focus, combined with selective CCC holdings, produces attractive returns while reducing volatility and the likelihood of having to chase claims in bankruptcy court.

FIGURE 15 – WHAT WAS ONCE INVESTMENT GRADE...



Source: BofA Merill Lynch for period ending June 30, 2016

FIGURE 16 – THE HIGH-YIELD SPECTRUM



Source: CIBC Asset Management Inc. as at September 30, 2016

A simple way to isolate the best risk-reward opportunities within the high-yield space is to look at the credit curve based on the incremental spread versus incremental financial risk. On this basis, the BB/B section of the curve provides the highest spread (or yield above Treasuries) per turn of leverage (as illustrated in Figure 17) and, thus, is an attractive area to focus one's efforts. One of the explanations for this phenomenon is the abundance of forced sellers of investment-grade debt when it is downgraded to the high-yield category. This excess yield becomes available to the high yield investor.

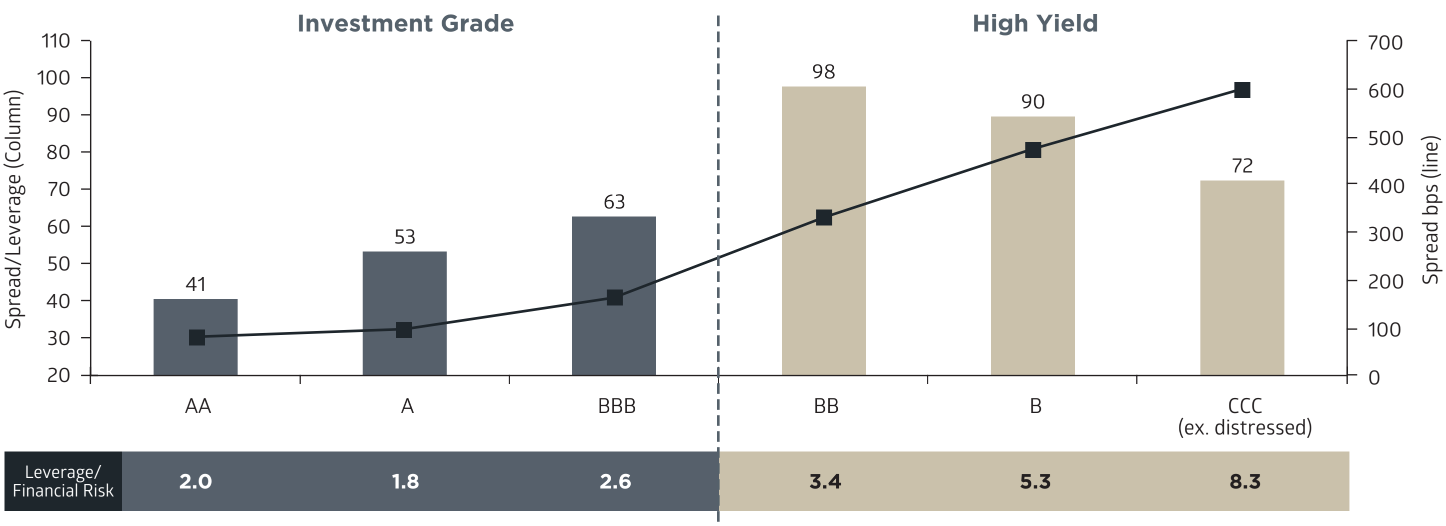
This section of the curve is where a large portion of high-yield managers concentrate their portfolios. As discussed, the heterogeneous nature of broad market benchmarks means that these BB/B focused managers are bound to underperform the broader market in 'risk-on' environments as distressed credit rallies. Conversely, they will generally outperform in 'risk-off' environments when distressed credit is hit hardest. Figure 3 showed that the median manager has had trouble outperforming this broad market. We return to this graph in Figure 18, with the understanding that the broader market consists of far riskier issues than the average manager would hold in a 'quality bias' portfolio. This time, managers are also benchmarked against an index that excludes distressed debt.

This produces the mirror image of the Figure 3 profile, with the median manager outperforming the market (ex. distressed), on average, over the period.

Again, this exercise illustrates the idiosyncratic nature of high yield. What at first glance looks like systemic underperformance is actually a reflection of the divided nature of the market rather than a manager's ability to add alpha.

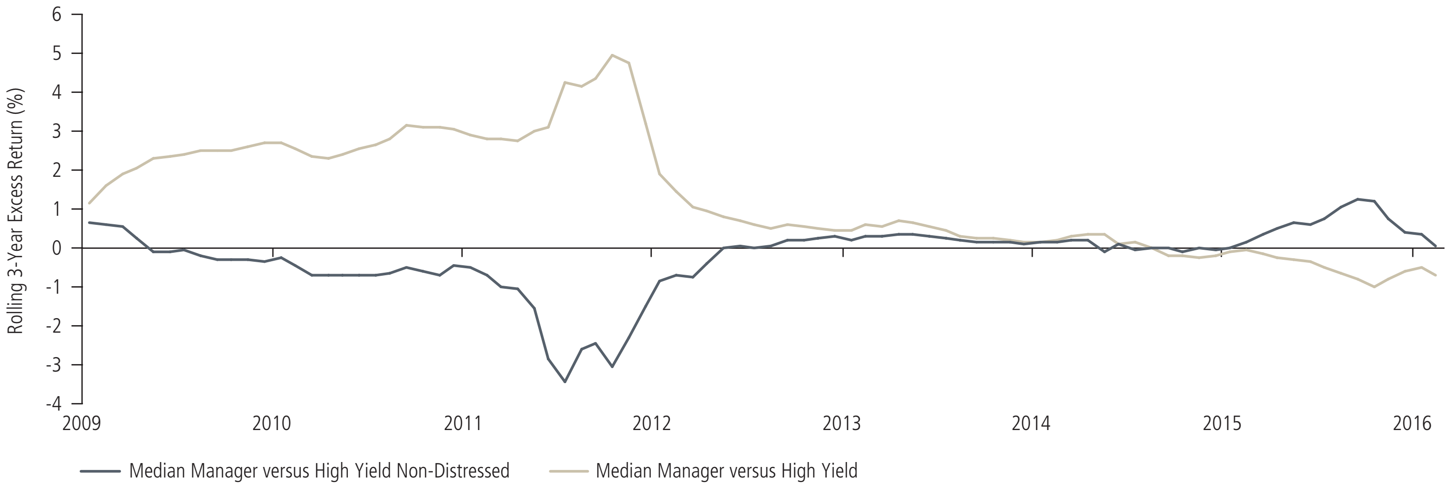
Aside from the classification issues discussed in this paper, we also explore the basic reasons why high yield is an attractive asset class today. Interestingly, many of the aspects that make high yield a hard-to-classify asset class also make it the most attractive to add to the asset mix. As the name suggests, the market offers a level of yield that has been high enough to more than offset the underlying price volatility that comes with owning higher leveraged businesses. Figure 19 depicts the components of total return for the high-yield market. Across the period, the income return has been consistent (although it exhibits a downward slope, in line with the direction of rates over the period). This yield level and consistency year-over-year have resulted in strong total returns (the green line) that more than offset shorter-term price variations (the red line). For the longer-term investor, year-over-year 'noise' in price returns can be weathered with an eye toward the total return potential.

FIGURE 17 – THE CREDIT CURVE SWEET SPOT



Source: CIBC Asset Management Inc., BofA Merill Lynch, JPMorgan as at September 30, 2016

FIGURE 18 – BENCHMARKING TO A MORE HOMOGENOUS MARKET

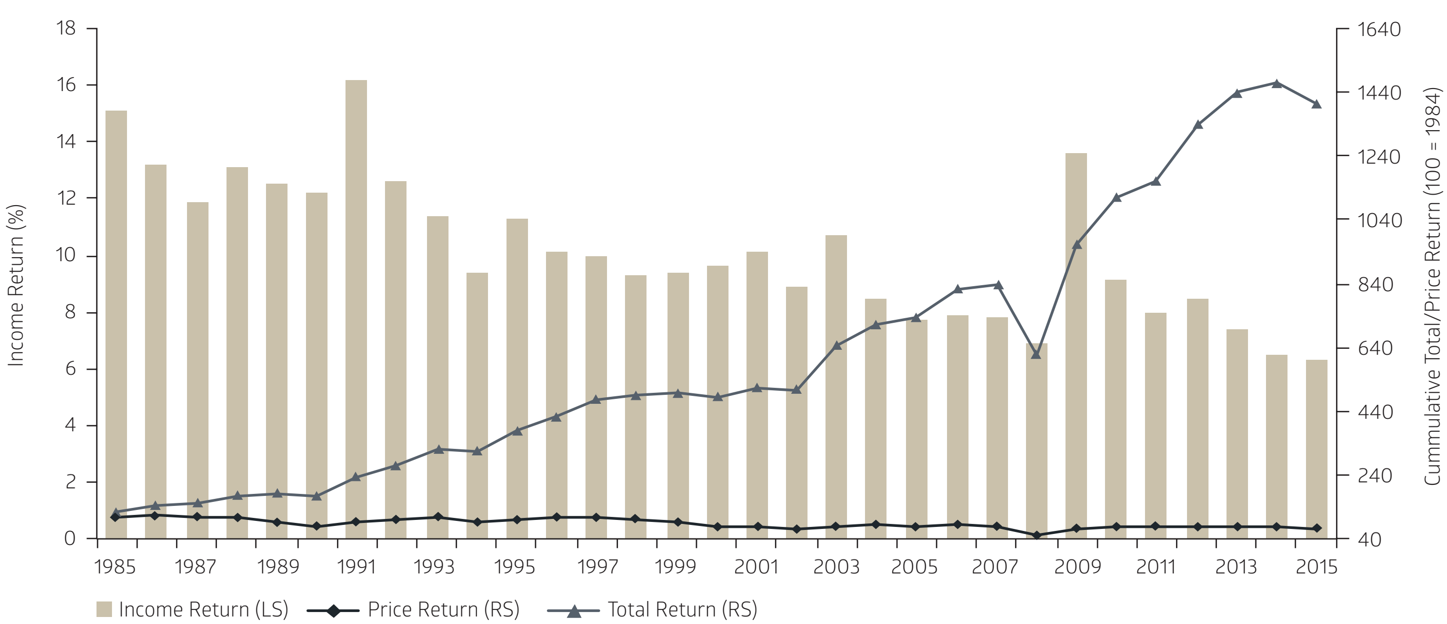


Source: BofA Merrill Lynch, eVestment, Median Manager of eA High Yield Universe for period ending June 30, 2016

Please note, this exercise was considered using benchmark information and would have looked better had we added active returns.

This is powerful information for a long-term investor. It shows that, over longer time periods the returns generated from high yield is similar to the total return expected from the asset class. Through time, capital losses offset capital gains, and the income return is what you can expect. This information leads to numerous conclusions. First, it confirms the asset class is not correlated with interest rates, which are the large driver of capital gains and losses on other fixed income instruments. The high level of income available to high-yield investors helps overshadow smaller capital gains and losses due to changes in interest rates, and thus lowers the correlation. The overall level of interest rates also affects the high-yield coupon rate, as this rate has fallen for the last 30 years. This implies that a long-term investor can expect approximate returns in the 6 –7% range. This number is high by today's standards, given the outlook for other asset classes. Further, in the context of the current massive reallocation of portfolio assets away from traditional to alternative assets, high yield should be on the table for discussion. High yield offers similar income-generating capabilities to many alternative asset classes and does so with relative liquidity compared to more illiquid asset classes.

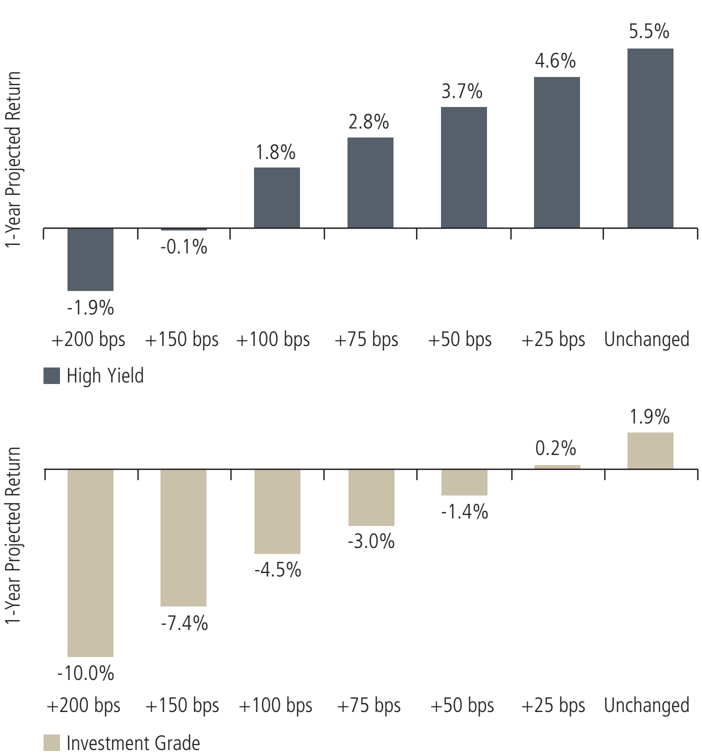
FIGURE 19 – INCOME CONTRIBUTING TO TOTAL RETURN



Source: BofA Merrill Lynch as at December 31, 2015

Given that high yield is a fixed income asset, it is often lumped into discussions regarding the implications of future rises in interest rates. However, the excess spread built into high yield makes it an attractive asset class in a rising rate environment. The built-in yield helps to offset price losses experienced during a cycle of rising rates. Also, not considered in the analysis is the impact of credit spreads. Considering that many of the prerequisites for a rate hike would include a strong growth backdrop, history suggests a rising rate environment would be partnered with a market where credit spreads are narrowing, adding to return. In Figure 20, the green bars show a stress test of the high-yield index based on immediate rate shocks to the U.S. yield curve. This produces both an immediate loss on the market portfolio and a one-year projected return with reinvestment at the new, higher rates, post-shock. A full 150 basis point, immediate shock would be required to wipe out the cushion provided by the yield and produce a flat total return for the one-year projection. Most would note that a one-time, 150 basis point shock is a highly unlikely scenario, especially considering today's low-growth and inflation environment. We would argue that if the U.S. Federal Reserve should enter a rate-hiking cycle, it would do so in a measured manner via small increments spread out over longer periods of time. In this type of scenario, high yield would perform even better than illustrated in Figure 20. In contrast, the blue bars demonstrate how U.S. investment grade corporate debt would fare under the same rate shock scenarios. This shows a big difference compared to high yield with only a 25 bps rate hike required to wipe out one year's worth of return.

FIGURE 20 – SHOCK AND AWE



Source: BofA Merrill Lynch, CIBC Asset Management Inc. as at June 30, 2016

As we have illustrated, not only has the high-yield market changed dramatically from its infancy, but this asset class now demonstrates the characteristics necessary to be a viable allocation within an institutional portfolio. How would such an allocation fit into the total portfolio context? This is the question we turn to next.

How Does High Yield Fit Into an Institutional Portfolio?

If we accept the premise that high yield is now an attractive asset class in today's environment, the next hurdle faced is exactly how to fit this puzzle piece into the total portfolio context. Due to high yield's hybrid nature (or, put another way, the versatility of the asset class), it fits in both the liability-hedging/risk-mitigating and return-seeking sides of the portfolio, depending on the investor's objectives.

FIGURE 21 – WHERE DOES HIGH YIELD FIT AND HOW?

Liability-Hedging Portfolio	High Yield	Return-Seeking Portfolio
Quality-bias only fixed income enhancer (i.e. Core Plus) Diversifier Provides cash flow and duration		Lower volatility, return-seeking asset Comparable to other alternatives Forward return expectations improving relative to other asset classes

We believe the plan sponsor's and consultant's categorization of high yield should drive the type of sub-strategy and high-yield manager chosen. It should also determine which benefits will be expected from such an exposure. These arguments are fairly intuitive. For a liability-hedging classification, sponsors should look for managers who focus on the BB/B sections of the credit curve and those who are less inclined to hold highly distressed paper. Sponsors can also leverage the fixed income aspects of high yield, including the addition of shorter-term cash flows to help match immediate liabilities.

If classified as return-seeking, high yield is still a viable exposure and can generally be thought of as a 'lower risk' alternative compared to more traditional allocations, such as equities. The versatility of high yield also makes it a good diversifier, whether held on the liability-hedging or return-seeking side of the portfolio. Figure 22 shows how high yield correlates with a selection of asset classes that exists on both the risk-seeking and risk-mitigating sides of the portfolio.

Clearly, high yield provides the greatest diversification away from typical liability-hedging exposures, such as Canadian and U.S. rates, provincials and investment-grade credit. Correlations increase when compared to equities. However, given the small exposure we recommend for the liability-hedge portfolio (0 –15%), the higher correlations do not materially affect the nature of the portfolio. The higher, but not perfect, correlations to equities make it an interesting candidate for an equity replacement (more on that later).

FIGURE 22 – LOWER CORRELATIONS ACROSS ASSET CLASSES

	HIGH YIELD	CANADIAN EQUITIES	U.S. EQUITIES	CANADIAN BONDS	CANADIAN CREDIT	CANADIAN GOVERNMENT BONDS	5-YEAR TREASURY	5-YEAR GOVERNMENT OF CANADA	U.S. CREDIT
High Yield	1								
Canadian Equities	0.56	1							
U.S. Equities	0.63	0.78	1						
Canadian Bonds	0.18	0.17	0.08	1					
Canadian Credit	0.33	0.29	0.20	0.96	1				
Canadian Government Bonds	0.05	0.09	-0.01	0.98	0.90	1			
5-Year Treasury	-0.10	-0.16	-0.21	0.66	0.54	0.70	1		
5-Year Government of Canada	0.00	0.05	-0.03	0.94	0.86	0.97	0.69	1	
U.S. Credit	0.57	0.27	0.26	0.65	0.68	0.58	0.62	0.50	1

Source: Thomson Reuters Datastream, BofA Merrill Lynch, Barclays
Please see disclaimer for list of indices used

Providing 'Plus' Exposure

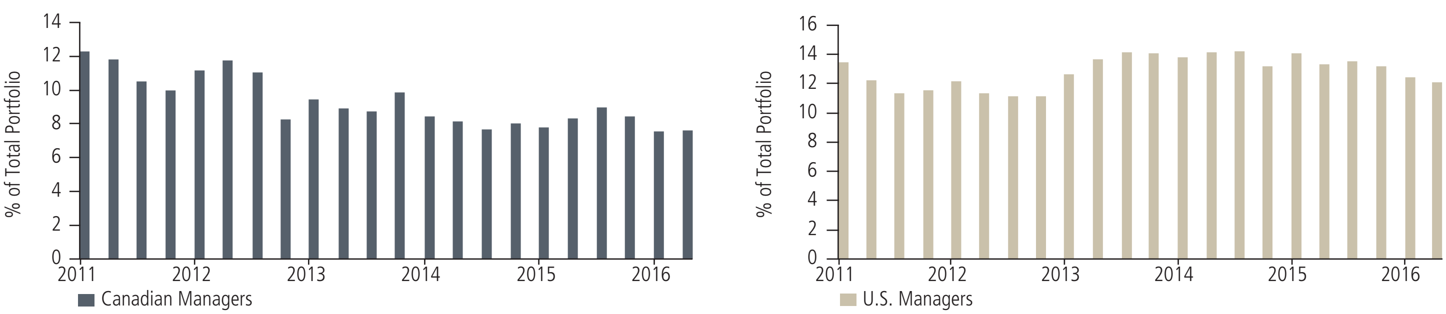
The most prevalent use of high yield in the Canadian market place is as a fixed income enhancer. This usually manifests itself as a 'plus' exposure within Core Plus strategies. Industry databases confirm this observation, with the average Canadian Core Plus managers holding anywhere from 8–12% of their portfolios in high-yield securities, and the average U.S. managers holding up to 15%, as per Figure 23. Given that overall Plus exposures range from 20–30% of the total portfolio, this is a significant weight.

The prevalence of high yield as a substantial 'plus' component in Core Plus mandates confirms that many Canadian bond managers have already recognized the benefits of allocations to the asset class. They are already introducing such exposures to institutional investors via Core Plus mandates.

High Yield in the De-Risking Context

We have discussed how to approach high yield from the liability-hedging and return-seeking perspective. However, plan sponsors should also consider the role high yield can play as they transition assets from the return-seeking side of their portfolio to the liability-hedging side—a process known as de-risking. One of the main reasons a liability-conscious plan would hold return-seeking assets is to help close funding gaps and keep pace with other moving targets, such as longevity risk and inflation. De-risking milestones are usually marked by an improvement in funded status. This improvement is captured in the portfolio by 'locking in' gains from return-seeking assets and shifting these exposures to duration and cash flow—matching strategies. High yield provides an interesting 'mid-step' between return-seeking and liability-hedging allocations, thanks to its versatile nature. Within the de-risking context, high yield can be considered a step toward a fixed income allocation while still providing a level of return that should exceed high-grade corporate and government bonds. This can help close lingering funding gaps or other unhedged risks. Combined with more traditional cash flow or duration-matching strategies, high yield can provide a more efficient allocation versus simply taking all risk off the table and going directly from equities to cash flow—matching government bonds.

FIGURE 23 – HIGH YIELD IS A 'GO TO' ALLOCATION FOR CORE PLUS MANAGERS

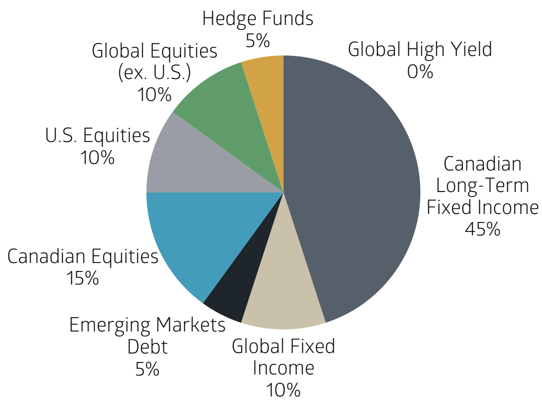


Source: eVestment, Median Manager of eA Canadian Core Plus Universe for Canada and eA U.S. Core Plus Manager for U.S. for period ending June 30, 2016

To illustrate this point in a simple manner, consider a standard institutional portfolio made up of the allocation pictured in Figure 24. We assume this portfolio has yet to begin its de-risking journey.

A simple optimization exercise highlights the benefits of using high yield as an equity replacement strategy. In Figure 25, the initial portfolio pictured in Figure 24 is transitioned, replacing the Canadian equity allocation with high yield. Historical returns and volatility are used to assess the Sharpe ratio produced by the increased high-yield exposure and decreased equity allocation. As shown, replacing the equity allocation with high yield provides a better risk-return profile compared to the original exposures. This exercise is also repeated by replacing non-Canadian equities with high-yield exposures. This produces the same incremental risk-adjusted return.

FIGURE 24 – INITIAL INSTITUTIONAL PORTFOLIO



For illustrative purposes only. Not an actual portfolio

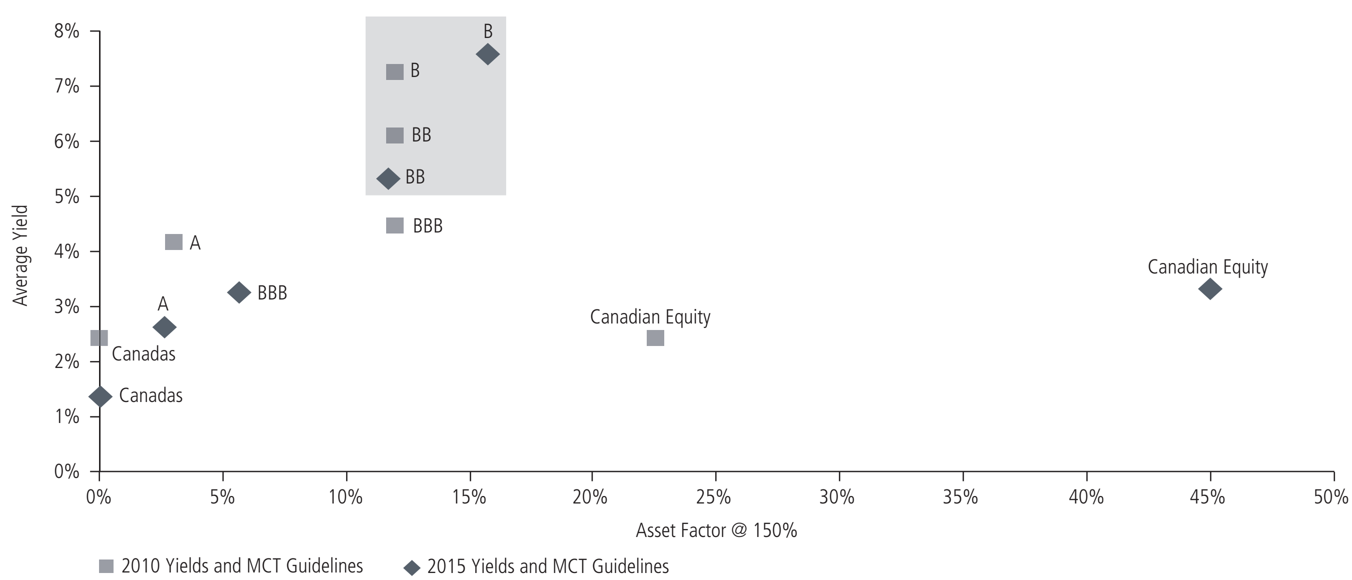
FIGURE 25 – HIGH YIELD REPLACING CANADA AND GLOBAL EQUITIES

	SHARPE RATIO
Initial Portfolio	0.95
Replacing Canadian Equities with High Yield	1.27
Replacing Foreign Equities with High Yield	1.41

Source: Thomson Reuters Datastream, CIBC Asset Managent Inc.

Beyond Pensions – P&C Application

The advantages of using high yield for optimal portfolio management can be applied beyond pension management. In the same way a manager can optimize a liability portfolio by adding high yield, the use of high yield can benefit the investment portfolio of a property & casualty (P&C) insurer. The main constraints for insurers are the capital constraints imposed by the regulator. Figure 26 illustrates how the cost of capital for equities has significantly risen, making them an inefficient form of capital to invest in. By contrast, BB and B rated bonds rank well in an optimized portfolio.



Source: Thomson Reuters Datastream, FTSE TMX Debt Capital Markets, BofA Merill Lynch, CIBC Asset Managent Inc.

Conclusion

High yield has come a long way but still has not garnered the respect it deserves. This asset class now offers enough versatility as a portfolio solution to overcome investors' preconceived notions. As institutional investors expand their investable universe to include more non-traditional asset classes, high yield is an interesting and effective asset class to add to their opportunity set. It provides attractive returns compared to traditional exposures, without the illiquidity that can accompany many alternative holdings. We strongly believe that high yield can play an important role in pension, foundation and insurance portfolios. We are confident this asset class will soon get the respect it deserves.

Indices used in correlation matrix and long-term historical returns:

High Yield – BofA ML US High Yield Cash Pay Index (CAD Hedged). High Yield Ex. Distressed – BofA ML US High Yield Non-Distressed Index (CAD Hedged. Canadian Equities – S&P/TSX Composite Index. U.S. Equities – S&P 500 Composite Index (CAD Hedged). Canadian Bonds – FTSE TMX Canada Universe Bond Index. Canadian Credit – FTSE TMX Canada All Corporate Bond Index. Canadian Government Bonds – FTSE TMX Canada Federal Bond Index. 5-Year Treasury – Treasury 5-Year Benchmark Bond (Constant Series). 5-Year Gov't of Canada – Government of Canada 5-Year Benchmark Bond (Constant Series). U.S. Credit – Barclays U.S. Aggregate Credit (High Grade, CAD Hedged). Real Estate – Median eVestment Canadian Real Estate Manager Returns. Infrastructure – Median eVestment Global Infrastructure Manager Returns

Working together on behalf of our clients, the Fixed Income Team and Institutional Team at CIBC Asset Management publish a variety of papers to help Canadian institutional investors remain current on the fixed income landscape in Canada. This paper was written with input from our dedicated high yield portfolio managers headed by Nicholas Leach, CFA. Connect with us to learn more about our research and opinions that could impact decision-making for your fixed income portfolio.

Carlo DiLalla, CFA
Vice-President & Senior Client Portfolio Manager – Fixed Income

For more information, visit: www.cibcam-institutional.com