

## Market Commentary

Independent Credit Research – Leveraged Finance – December 2013

# STRATEGIES FOR INVESTING IN A RISING RATE ENVIRONMENT

The long awaited “taper” has finally come. After months of fear and speculation as to what the end of quantitative easing meant for rates, we saw little response to the actual news in the bond market. This response really wasn’t a surprise. In anticipation, we have already seen a big move up in rates since the lows of the year. In early May, before the hints of tapering began, we saw rates bottom at 0.65% on the 5-year and 1.66% on the 10-year. Today, we sit at 1.66% on the 5-year and 2.89% on the 10-year.<sup>1</sup>

With unemployment still elevated, very moderate global growth, minimal inflation, and the Fed explicitly clear in the message that tapering does not mean tightening, all the while extending their low interest rate policy for the next couple years, it is unclear that a rapid rise in rates is on the horizon, especially given the big move we have already seen. But for the sake of argument, let’s assume that rates do rise even further. What does that mean for the high yield market and the various “strategies” out there to deal with rising rates?

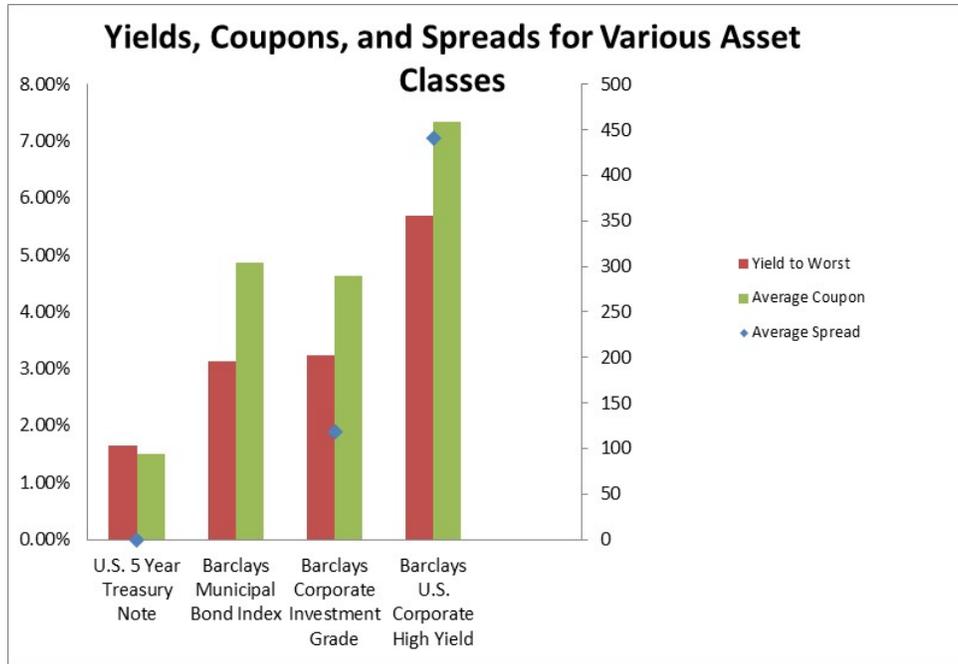
### High Yield in a Rising Rate Environment

First let’s look at the high yield market and how it has traditionally responded to rate moves. Historically speaking, the high yield bond market has performed well in a rising rate environment.

*Higher coupons and yields in the high yield space help cushion the impact of rising interest rates.* High yield bonds, as the name would suggest, have traditionally offered among the highest coupons/yields of various fixed income instruments. The following chart depicts yields, coupons, and the spread over Treasuries for several fixed income asset classes.<sup>2</sup>

<sup>1</sup> Data sourced from the Federal Reserve website and as of December 20, 2013.

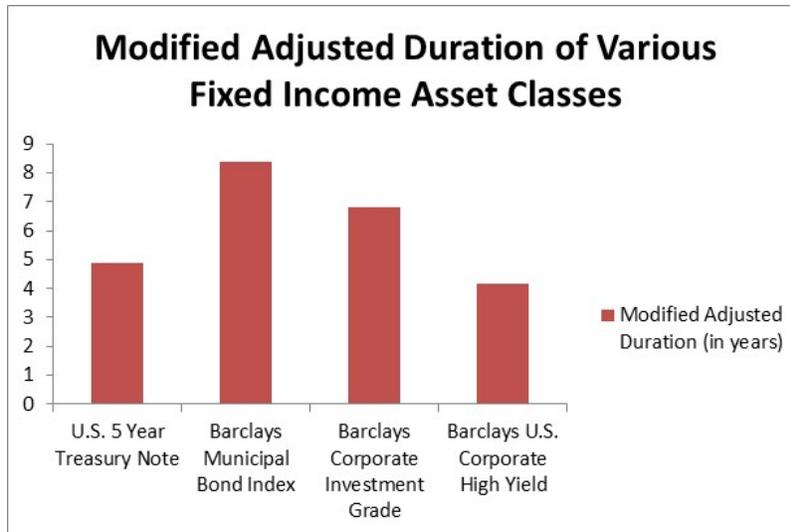
<sup>2</sup> Barclays Capital U.S. High Yield Index covers the universe of fixed rate, non-investment grade debt (source Barclays Capital). U.S. 5 Year Treasury Note is the on-the-run Treasury (source Bloomberg). Barclays Corporate Investment Grade Index consists of publicly issued U.S. corporate and specified foreign debentures and secured notes that meet the specified maturity, liquidity, and the quality requirements (source Barclays Capital). Barclays Municipal Bond Index covers the long-term, tax-exempt bond market (source Barclays Capital). All data as of 12/19/13. The yield to worst is the lowest potential yield that can be received on a bond, without the issuer actually defaulting, and includes the various prepayment options such as call or sinking fund. The spread is the spread to worst based on the yield to worst less the yield on Treasuries. The coupon is the annual interest rate on a bond.



Let's think about this intuitively for a minute. If you own a bond with a yield of 3% and interest rates move up 1% that would obviously have a meaningful impact, as we are talking about move equivalent to 33% of your total yield. However, if you instead have a starting yield of 6.0% on a bond and interest rates move that same 1%, you are looking at a significantly less impact. So the higher the yield the less the interest rate sensitive the bond per the duration calculation that we discuss below and the more income is being generated to offset any impact from a bond price response to the interest rate move.

*High yield bonds have shorter durations than other asset classes in the fixed income space.* Duration is a measure of sensitivity to changes in interest rates that incorporates the coupon, maturity date, and call features of a bond. The fact that high yield bonds are typically issued with five to ten year maturities and are generally callable after the first few years, as well as offer higher coupons, provides the high yield sector with a shorter duration, thus less interest rate sensitivity, versus other asset classes. We've profiled some duration comparisons below:<sup>3</sup>

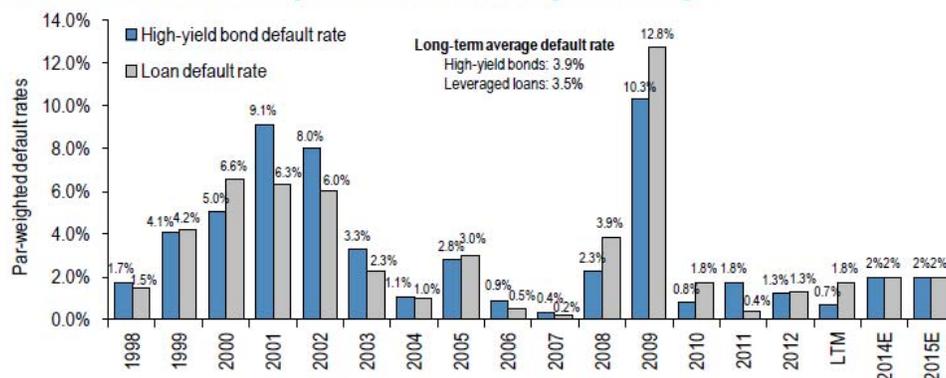
<sup>3</sup> Barclays Capital U.S. High Yield Index covers the universe of fixed rate, non-investment grade debt (source Barclays Capital). U.S. 5 Year Treasury Note is the on-the-run Treasury (source Bloomberg). Barclays Corporate Investment Grade Index consists of publicly issued U.S. corporate and specified foreign debentures and secured notes that meet the specified maturity, liquidity, and the quality requirements (source Barclays Capital). Barclays Municipal Bond Index covers the long-term, tax-exempt bond market (source Barclays Capital). All data as of 12/19/13. The Modified Adjusted Duration is a measure of interest rate sensitivity based on the Yield to Maturity date.



The prices of high yield bonds have historically been much more linked to credit quality than to interest rates. Historically, interest rates are increasing during a strengthening economy and a strong economy is generally favorable for corporate credit and equities alike. Due to the nature of the high yield bond market, the major risk on the minds of investors is default risk (not interest rate risk), causing them to be much more concerned with the company’s fundamentals and credit quality than interest rates. When the economy is expanding, profitability, financial strength, and credit metrics often improve as well. So a stronger economy would undoubtedly be a positive from a credit perspective and would indicate lower default rates, meaning improved prospects for the high yield market.

Even in today’s environment of low to moderate economic growth, we are still seeing improved fundamentals for corporations and a well below average default outlook for the next couple years<sup>4</sup>:

Default rates below 2% through 2015 are half their long-term average



Source: J.P. Morgan.

<sup>4</sup> Acciavatti, Peter, Tony Linares, Nelson R. Jantzen, CFA, Rahul Sharma, and Chuanxin Li. “2013 High Yield-Annual Review,” J.P. Morgan North American High Yield Research, December 23, 2013, p. 14.

*High yield bonds are negatively correlated with Treasuries.* This means that as Treasury prices go down due to yields (interest rates) increasing, high yield would theoretically experience the opposite change (increase) in pricing. Additionally, while high yield is still positively correlated to investment grade, it is a fairly low correlation; yet, we see a strong correlation between investment grade and Treasuries. As a recent J.P. Morgan report explained, “Over the past 15 years, high-yield bonds and loans exhibit correlations to movements in the 10-year Treasury bond of -0.2 and -0.4, respectively, versus a far higher correlation of +0.6 for high-grade bonds.” Looking over just the last five years, we see a similar takeaway.<sup>5</sup>

Correlations among various assets  
(Five years ended October 31, 2013)

	5-year Treasury	10-year Treasury	JPMorgan JULI High-Grade Index	JPMorgan Domestic HY Index	JPMorgan EMBI- Global Composite	JPMorgan Domestic HY Equity Index	S&P 500	Russell 2000
10-year Treasury	0.92							
JPMorgan JULI High-Grade Index	0.51	0.51						
JPMorgan Domestic HY Index	-0.33	-0.45	0.39					
JPMorgan EMBI- Global Composite	0.32	0.22	0.73	0.59				
JPMorgan Domestic HY Equity Index	-0.35	-0.49	0.14	0.74	0.47			
S&P 500	-0.26	-0.38	0.15	0.62	0.45	0.94		
Russell 2000	-0.34	-0.43	0.11	0.63	0.40	0.95	0.94	
Leveraged loans	-0.58	-0.68	0.03	0.85	0.24	0.60	0.46	0.47

Source: J.P. Morgan.

Given these low or negative Treasury correlations versus other asset classes, especially the more interest rate sensitive asset classes such as investment grade, an allocation to high yield bonds can help serve to improve portfolio diversification and potentially lower risk. On the flip side, an allocation to investment grade not only provides you a much lower starting yield but significantly more interest rate sensitivity.

Those are nice theories, but let’s look at some hard data as to how high yield has actually performed in a rising rate environment. Since 1980, Treasury yields have increased (i.e., interest rates rose), in 15 of those years. In every one of those years, high yield has outperformed the investment grade market, including this year with a performance of 7.9% in high yield versus -0.8% in investment grade year-to-date, through December 20<sup>th</sup>, 2013. The long-term numbers show that over those 15 years since 1980 where we saw Treasury yield increases (i.e., interest rates rose), high yield had an average return of 13.6% (or 10.4% if you exclude the massive performance in 2009). This compares to only a 4.5% average return (or 3.6% excluding 2009) for investment grade bonds over the same period.<sup>6</sup>

<sup>5</sup> Acciavatti, Peter, Tony Linares, Nelson R. Jantzen, CFA, Rahul Sharma, and Chuanxin Li. “2013 High Yield-Annual Review,” J.P. Morgan North American High Yield Research, December 23, 2013, p. 112, 97.

<sup>6</sup> Data sourced from: Acciavatti, Peter Tony Linares, Nelson R. Jantzen, CFA, Rahul Sharma, and Chuanxin Li. “2008 High Yield-Annual Review,” J.P. Morgan North American High Yield Research, December 2008, p. 113. “High-Yield Market Monitor,” J.P. Morgan, January 5, 2009, January 5, 2010, January 3, 2011, January 3, 2012, and January 2, 2013. “Credit Strategy Weekly Update,” December 20, 2013, p. 22. 2008-2012 Treasury data sourced from Bloomberg (US Generic Govt 5 Yr), 2013 data from the Federal Reserve website. The J.P. Morgan High Yield bond index is designed to mirror the investible universe of US dollar high-yield corporate debt market, including domestic and international issues. The J.P. Morgan Investment Grade Corporate bond index represents the investment grade US dollar denominated corporate bond market, focusing on bullet maturities paying a non-zero coupon. YTD data as of December 20, 2013.

<b>Year</b>	<b>J.P. Morgan High Yield Bond Index Return</b>	<b>J.P. Morgan Investment Grade Corp Bond Index Return</b>	<b>Change in 5 Yr Treasury Yield</b>
<b>1980</b>	4.3%	0.5%	2.21%
<b>1981</b>	10.4%	2.3%	1.38%
<b>1982</b>	36.3%	35.5%	-3.88%
<b>1983</b>	20.3%	9.3%	1.44%
<b>1984</b>	9.4%	16.2%	-0.46%
<b>1985</b>	28.7%	25.4%	-2.58%
<b>1986</b>	15.6%	16.3%	-1.68%
<b>1987</b>	6.5%	1.8%	1.59%
<b>1988</b>	11.4%	9.8%	0.73%
<b>1989</b>	0.4%	14.1%	-1.30%
<b>1990</b>	-6.4%	7.4%	-0.15%
<b>1991</b>	43.8%	18.2%	-1.75%
<b>1992</b>	16.7%	9.1%	0.07%
<b>1993</b>	18.9%	12.4%	-0.79%
<b>1994</b>	-1.6%	-3.3%	2.62%
<b>1995</b>	19.6%	21.2%	-2.45%
<b>1996</b>	13.0%	3.7%	0.83%
<b>1997</b>	12.5%	10.4%	-0.50%
<b>1998</b>	1.0%	8.7%	-1.17%
<b>1999</b>	3.4%	-1.9%	1.80%
<b>2000</b>	-5.8%	9.9%	-1.37%
<b>2001</b>	5.5%	10.7%	-0.67%
<b>2002</b>	2.1%	11.0%	-1.57%
<b>2003</b>	27.5%	7.9%	0.51%
<b>2004</b>	11.5%	5.3%	0.36%
<b>2005</b>	3.1%	1.7%	0.74%
<b>2006</b>	11.5%	4.3%	0.34%
<b>2007</b>	2.9%	5.3%	-1.25%
<b>2008</b>	-26.8%	-1.8%	-1.89%
<b>2009</b>	58.9%	17.5%	1.13%
<b>2010</b>	15.1%	8.9%	-0.67%
<b>2011</b>	5.7%	8.5%	-1.17%
<b>2012</b>	16.2%	9.9%	-0.11%
<b>YTD 2013</b>	7.1%	-0.8%	0.94%

So the data is clear that high yield has historically not only provided investors with solid returns during periods of rising interest rates, but has also dramatically out performed its investment grade counterpart.

### Short Duration

Part of the reason for the outperformance for high yield versus investment grade bonds can be attributed to the high yield market's shorter duration versus other fixed income asset classes. It

was hard to ignore the call in the fixed income space for “short duration” over the second half of this year. As noted above, duration is a measure of interest rate sensitivity (the percentage change in the price of a bond for a 100 basis point move in rates), so the lower the duration the less sensitive those bonds are to interest rate movements. Lower duration bonds would not eliminate the interest rate impact, just lessen it. We see this as a good strategy broadly speaking if you are talking the high yield asset class versus the investment grade asset class, with the high yield market naturally having a much lower duration. However, we believe this strategy is lacking when it is used to parse out the high yield space itself, investing in only the lower duration names within the high yield category.

This gets back to the concept of yield. In a box, this sounds like a good strategy, but you need to factor in the starting yield on the portfolio to mathematically assess if practically speaking this is the right strategy. If you were to invest according to a “short duration” strategy in the high yield market, let’s hypothetically say you could achieve a portfolio with a duration of 2.15 years, so a 100 bps change in rates over 6mos would mean that the price of your portfolio would theoretically decline by 2.15%. If your starting current yield on the portfolio was 7%, meaning you generate 3.5% of income over that 6mos, then you are looking at a theoretical net gain of 1.35% (3.5% - 2.15%) over the period of rising rates. However, if you can build a portfolio in the high yield bond and loan market investing according to both maximizing yield and considering duration, let’s say you can build a portfolio with a duration of 3 years and a current yield of around 9%. In this case, your theoretical sensitivity to a 100bps movement over 6mos would be a price change of 3%, but you would be generating 4.5% of income over the 6mos, so your net theoretical gain would be 1.5%. If that 100bps interest rate movement is over a year instead of 6 months, that yield benefit gets even larger, putting you at a theoretical net gain of 4.85% for the hypothetical short duration portfolio versus a theoretical gain of 6.0% for the higher yielding portfolio.<sup>7</sup>

So we see this as compelling evidence that investing purely according to a short duration strategy and not factoring in yield is not necessarily the wisest way to approach this environment. At the end of the day, yield matters. A higher yield can go a long way in making up for relatively small differences in duration. Furthermore, even if rates do rise, it very well can take longer than many expect, making the argument for the higher yielding portfolio versus the purely short duration portfolio even stronger.

### **Hedged High Yield: Long High Yield, Short Treasuries**

Another strategy within the high yield market that we have seen emerge over the past year, though with much less fanfare, has been “hedged high yield.” The gist of the strategy here is to go long high yield bonds and short Treasuries. The basic premise is that the strategy will hedge interest rate risk, with any bond pricing decline due to rising rates being offset with the short in Treasuries. At face value this makes sense, as the adage in fixed income is that prices and yields/rates move in opposite directions, so as interest rates increase, prices decline. However, the problem is that this really isn’t true in the high yield space.

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<sup>7</sup> The duration and price movement relationships are approximates and calculations are provided for illustration only. These calculations assume that credit spreads remain constant and do not factor in any fees or expenses. Actual results may be materially different.

As we noted above, high yield bonds have actually performed very well when interest rates increase and Treasuries and high yield bonds actually have a negative correlation. So while a short Treasury position may be appropriate to offset your interest rate risk in the investment grade world, where there is a positive correlation with Treasuries, it does not appear appropriate in the high yield space.

Further, we see another big problem with a combined portfolio of being long high yield bonds and short Treasuries: during times of systemic market disruptions we see a “flight to quality” trade, where investors abandon perceived “risky” assets such as high yield bonds and pile into “risk free” Treasuries. So in a situation like this, you would not only be hit on a decline in your high yield bonds as investors sell them, but you would be hit on your short Treasury position as investor flock to these assets and bid up the price of Treasuries. So at face value the “hedge” sounds appealing, but it very well may be far from a hedge depending on the market environment.

## Leveraged Loans

Finally, what has been the most popular strategy within the non-investment grade world is investing in floating rate loans. Because these are floating rate securities, there has been a massive interest in this space by those concerned about higher rates. The demand for and expansion in the loan market can’t be described in any way other than astounding. We have seen \$61.7 billion flow into bank loan exchange traded and mutual funds just this year. This compares to the previous annual record of \$17.9 billion in 2010.<sup>8</sup> We have seen a record \$664.5 billion in bank loans issued this year. This handily beats the prior record high of \$388 billion seen in 2007.<sup>9</sup> And just to verify it has been a one-way trade over the last year and a half, we’ve seen 79 consecutive weeks of inflows into bank loan mutual funds and ETFs.

At face value this seems like a “no brainer” trade, and many have embraced it as such, but the actual numbers tell a bit of a different story. YTD, floating rate loans have returned 5.1% versus 7.9% for high yield bonds.<sup>10</sup> This has been in a year when the 10-year Treasury yield has increased over 120bps. It would seem that if floating rate loans are really the answer to rising rates, we would have seen a better return, especially given the massive inflows into the asset class. And even with the 10-year Treasury yield increasing by over 1.2% (or over 50% from the beginning of year yield), the high yield market, helped by higher initial starting yields, has still well outperformed the loan market this year.

The first consideration when investing in the loan market must be understanding to what the “floating” rate is tied. Bank loans are generally based on short-term LIBOR rates, which have moved very little this year despite the big moves we have seen in various Treasury rates.<sup>11</sup>

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<sup>8</sup> Acciavatti, Peter, Tony Linares, Nelson Jantzen, CFA, Rahul Sharma, and Chuanxin Li. “Credit Strategy Weekly Update,” J.P. Morgan North American High Yield and Leveraged Loan Research, December 20, 2013, p. 7.

<sup>9</sup> Acciavatti, Peter, Tony Linares, Nelson Jantzen, CFA, Rahul Sharma, and Chuanxin Li. “Credit Strategy Weekly Update,” J.P. Morgan North American High Yield and Leveraged Loan Research, December 20, 2013, p. 6.

<sup>10</sup> Acciavatti, Peter, Tony Linares, Nelson Jantzen, CFA, Rahul Sharma, and Chuanxin Li. “Credit Strategy Weekly Update,” J.P. Morgan North American High Yield and Leveraged Loan Research, December 20, 2013, p. 22.

<sup>11</sup> Data as of 12/31/13, sourced from Bloomberg.

<b>LIBOR RATES</b> (data as of 12/31/13)	<b>Today</b>	<b>Month Ago</b>	<b>Year Ago</b>
<b>3 Month LIBOR Rate</b>	0.25	0.24	0.31

Additionally, many if not most loans have LIBOR floors, generally ranging from 1-1.5%, meaning we would need to see a substantial rise in short-term LIBOR rates before there was any impact on the coupon paid on the loan.

An investor should also keep in mind that with all of the money flowing into the loan asset class and chasing securities over the last couple years, there are now many overvalued names in the space. This has left a huge portion of the market priced around or above par, and with little in the way of call premiums offered in this market, there also appears minimal potential for further price appreciation for many of these loans. Finally, the general perception seems to be that loans are always less risky than bonds. However the reality is that many companies have debt financing that consists entirely of loans and some of those loans are still part of capital structures that are very highly levered.

At the end of the day, a loan investor may be left with a security that has a low starting yield, little left in the way of capital gains potential, and with coupon income that is not at all increasing despite the current rate move.

## **Summary and Conclusion**

Instead of focusing on lower duration securities, embracing a “hedged high yield” strategy, or seeing a broad loan allocation as the panacea to rising rates, we view a more balanced approach to investing in the high yield bond and loan space. Active managers can choose the companies they feel offer the best yield potential for the given risk, be it in bond or loan land. This can include both bonds with higher yields and higher durations, mixed with lower duration bonds that still offer value. We view the loan market primarily as a way to expand the investment universe and opportunity set, granting investors access to companies that do not issue bonds. The fact that these loans lower portfolio duration may or may not be beneficial depending upon future interest rate moves.

It remains unclear to us whether much of the rate rise expected by market participants has already been priced in. While tapering means the Federal Reserve will be backing off of purchasing both mortgages and Treasuries, there remains substantial demand from fixed income investors, particularly pension plans focused on LDI, or liability driven investing, and retirees needing income. Moreover, some of the headwinds outlined earlier (moderate growth, low inflation, high unemployment and a Fed committed to a low interest rate policy) could further constrain rates. But if rates do rise further, higher starting yields help cushion the portfolio from interest rate movements, and historically, this year included, high yield bonds have actually performed well during periods of rising rates. And if rates don’t rise, investors are still well positioned to generate what we see as an attractive yield. We believe that an active and balanced approach to the high yield bond and loan market, focusing on maximizing yield for the given credit and interest rate risk, is the best way to be positioned for the current environment.

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