

?Invariably, investors who disregard where they stand in cycles are bound to suffer serious consequences? ? Howard Marks

If you believe, as we do, that the current economic cycle is likely at a similar point as 2006/07, then you should consider heeding the warning of the charts we are about to show you.

The current economic cycle stretching from the market peak of 2006/07 to today started with euphoria in the housing markets and investors taking a general indifference towards risk-taking. In 2008, reality caught up with the financial markets and desperation fueled sharp drawdowns, punishing many risky assets. The recovery that began in 2009 has been increasingly fueled by investor enthusiasm. While the stock market gets the headlines, this fervor has been every bit as evident in the junk bond sector of the corporate fixed- income markets.

[Has This Cycle Reached Its Tail](#) illustrated how investor sentiment and economic activity has evolved, or cycled, over the last 12 years. We recommend reading it as additional background for this article.

The Popularity of Junk

Junk debt or non-investment grade securities also known as high yield debt will be referred to as ?junk? for the remainder of this article. They are defined as corporate debt with a credit rating below the investment grade threshold (BBB-/Baa3), otherwise known as ?triple B.?

Historically, buyers of junk debt were credit specialists due to the need for an in-depth understanding of the accounting and financial statements of companies that bear a larger risk of default. Extensive analysis was required to determine if the higher yield offered by those securities was enough to cushion the elevated risk of default. The following questions are just a small sample of those a junk investor would want to answer:

- Will the company?s cash flow be sufficient to make the payments on the debt?
- If not, what collateral does the company have to support bond holders?
- What is the total recovery value of plant, property and other capital represented by the company?
- Does the yield on the junk bond offer a reasonable margin of safety to justify an investment?

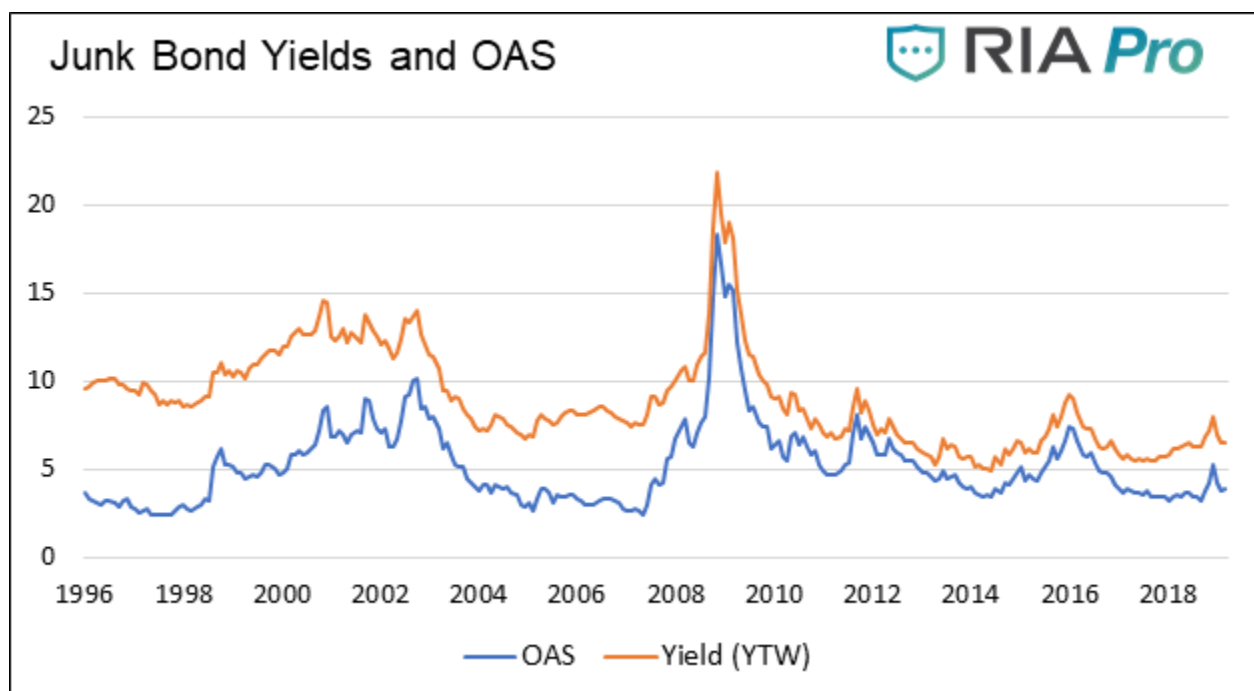
Since the financial crisis, the profile of the typical junk investor has changed markedly. Gone are the days when the aforementioned specialized analysts, akin to accountants, were the predominant investors. New investors, many of whom lack the skills to properly evaluate such investments, have entered the high yield debt arena to boost their returns. We believe that many such investors are ill-prepared for the risk and volatility that tend to be associated with non-investment grade bonds when the economic cycle turns.

The advent of exchange-traded funds (ETF?s) has made investing in junk-rated debt much easier and more popular. It has opened the asset class to a larger number of investors that have traditionally avoided the sector or simply did not have access due to investment restrictions. ETF?s

have turned the junk market into another passive tool for the masses.

The combination of investors' desperate need for yield along with the ease of investing in junk has pushed spreads and yields to very low levels as shown below. While a yield of 6.40% may seem appealing versus Treasury bonds yielding little more than the rate of inflation, consider that junk yields do not factor in losses due to default. Junk default rates reached double digits during each of the last three recessions. A repeat of those default rates would easily wipe out years of returns. Even in a best-case scenario, an annual 2.5-3.5% default rate would significantly reduce the realized yield. The graph below charts yields and option-adjusted spread (OAS).

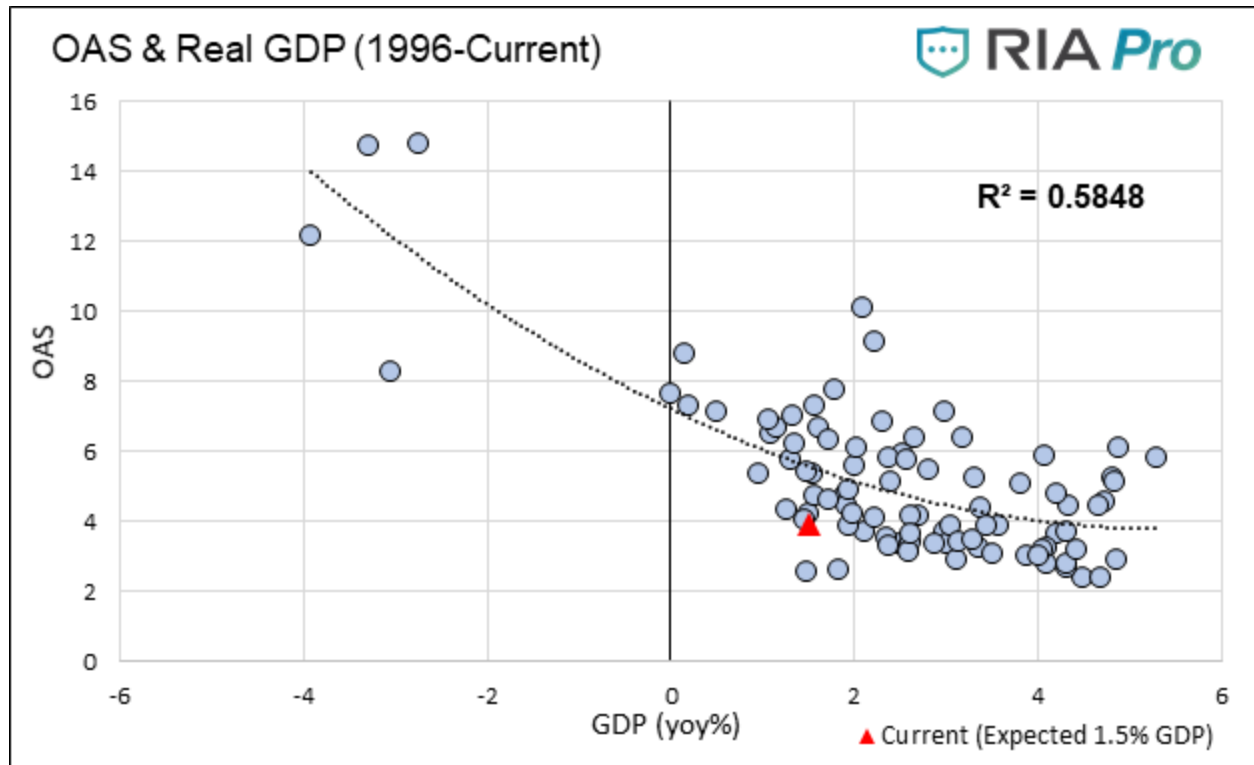
OAS measures the spread, or additional yield, one expects to receive versus investing in a like maturity, risk-free U.S. Treasury bond. It is important to note that spread is but one measure investors must consider when evaluating prospective investments. For example, even if OAS remains unchanged while Treasury yields increase 300bps, the yield on the junk bond also increases 300bps and produces an approximate 15% price decline assuming a 5-year duration.



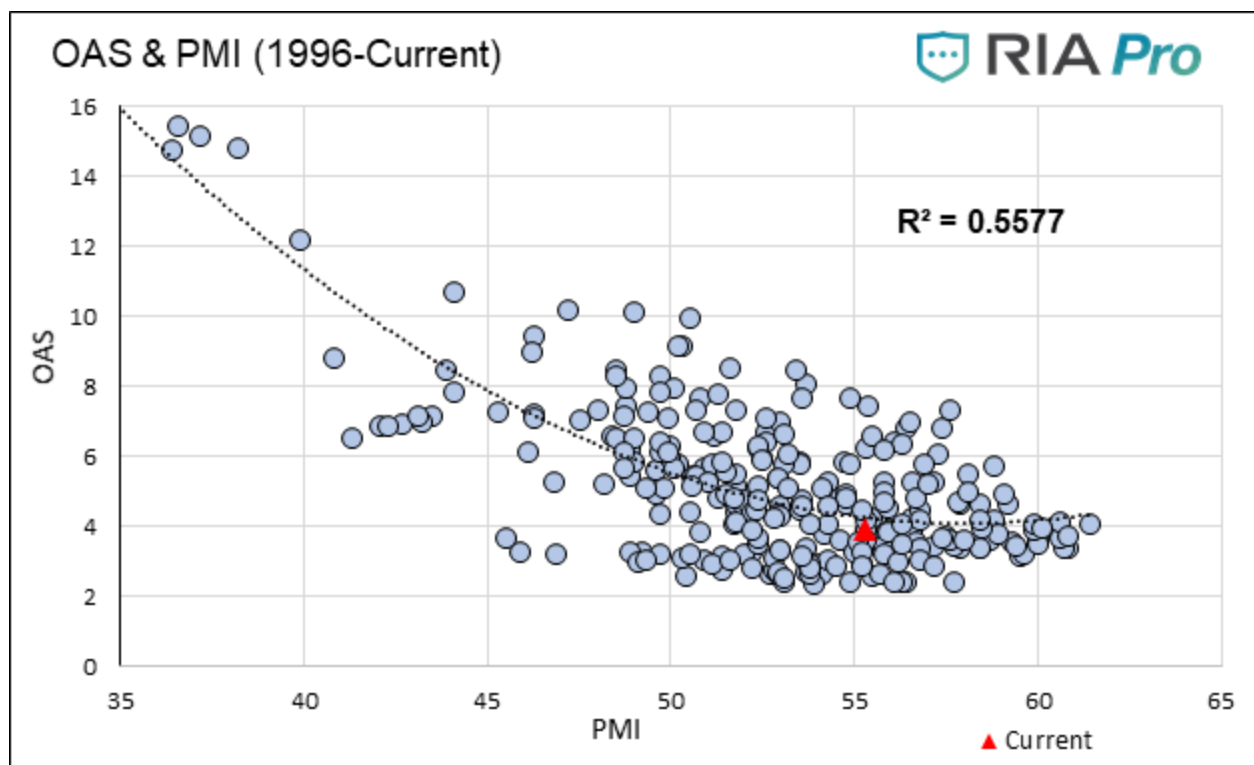
Junk Debt Spreads (OAS) and Economic Data

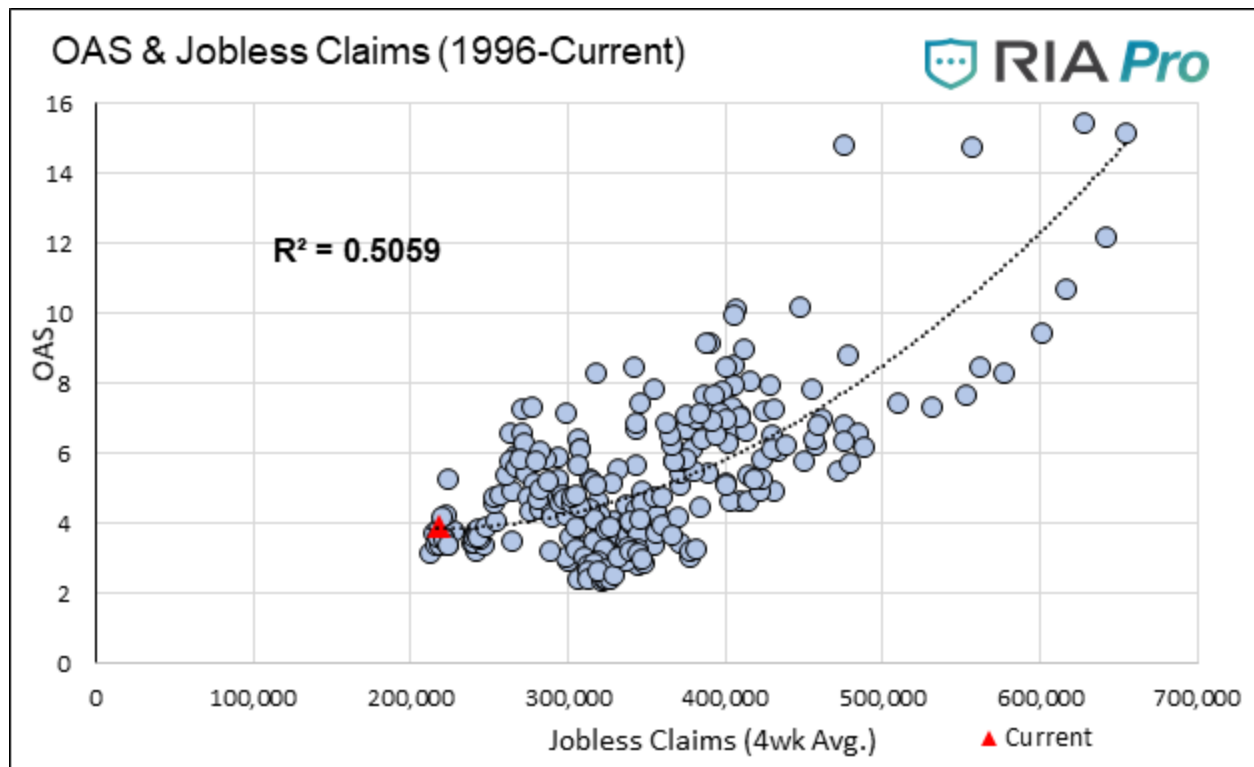
Economic activity and corporate profits are well-correlated. Given the tenuous nature of companies in junk status, profits and cash flows are typically extremely sensitive to economic activity. The following graphs illustrate current valuations and guide where spreads may go under certain economic environments. The label R^2 in the graph is a statistical measure that calculates the amount of variance of one factor based on the other factor. The R^2 , of .58 in the graph below, means that 58% of the change in OAS is due to changes in real GDP.

In the scatter plot below, each dot represents the respective intersection of OAS and GDP for each quarterly period. Currently, as indicated by the red triangle, OAS spreads are approximately 175 basis points too low (expensive) given the current level of GDP. More importantly, the general upward slope of the curve denotes that weaker economic activity tends to result in wider spreads. For instance, we should expect OAS to widen to 10% if a recession with -2.00% growth were to occur.

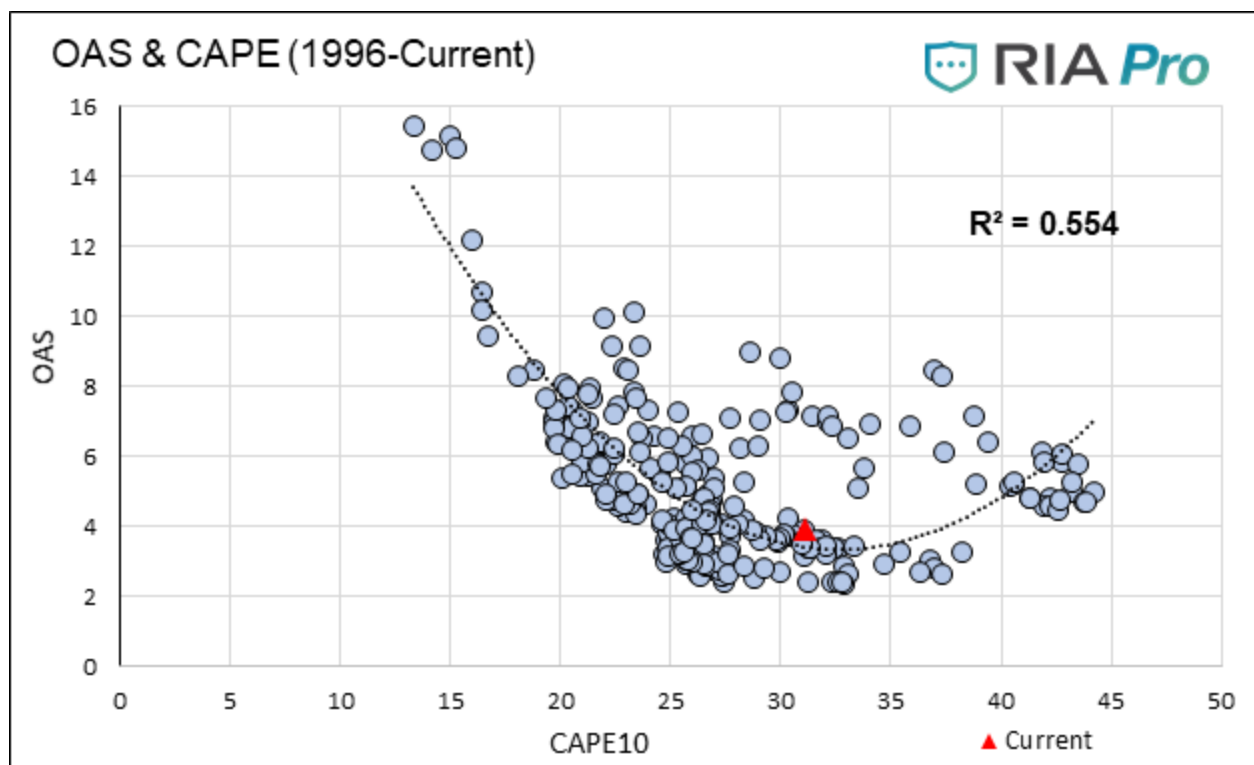


The following are scatter plots of OAS as contrasted with PMI (business confidence/plans) and Jobless Claims (labor market). The current OAS versus the dotted trend line is fair given the current level of PMI and Jobless Claims. However, if the economy slows down resulting in weaker PMI and rising jobless claims, we should expect a much higher OAS. Note both graphs have a significant R^2 .

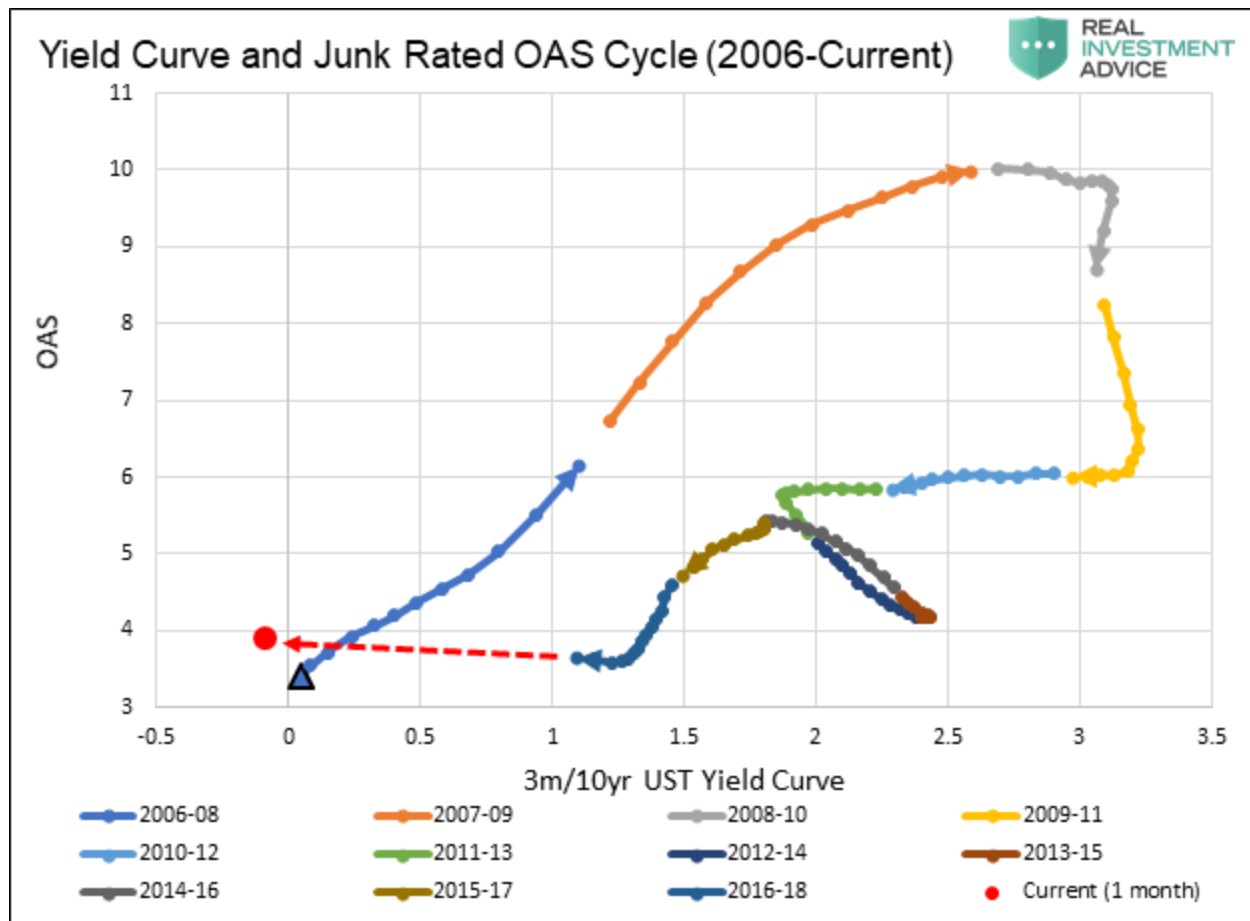




As discussed earlier, frothy equity markets and junk spreads have rewarded investors since the financial crisis. The scatter plot below compares OAS to CAPE10 valuations. A return to an average CAPE (16) should result in an OAS of nearly 10. Assuming that such an event was to occur, an investor with a five-year junk bond could lose almost 30% in the price of the bond assuming no default. Default would harm the investor much more.



We finish up with a similar graph as we presented in *Has This Cycle Reached Its Tail*. A special thank you to Neil Howe for the idea behind the graph below.



The graph, using two year averages compares the U.S. Treasury yield curve and junk OAS. The yield curve serves as a proxy for the economic cycle. The cycle started with the blue triangle which is the average yield curve and OAS for 2006 and 2007. As the cycle peaked and the financial crisis occurred, the yield curve widened, and junk OAS increased significantly. Starting in 2009, recovery took hold resulting in a flattening yield curve and lower junk OAS. The current *one month* point denoted by the red dot shows that we have come full circle to where the cycle began over ten years ago.

Trade Idea

Given the unrewarding risk-return profile of junk bonds, we recommend investors consider reallocating from junk to investment grade corporates, mortgages or U.S. Treasuries. For those more aggressive investors, we recommend a paired trade whereby one shorts the liquid ETF's (HYG/JNK) and purchases an equal combination of investment grade corporates (LQD) and U.S. Treasuries (IEI).

Had one put on the paired trade mentioned above in 2014, when junk yields were at similar levels, and held the trade for two years, the total return over the holding period was 16.75%. Similarly, such a trade established in January of 2007 and held for two years would have resulted in an approximate total return of nearly 38.85%.

Investment return data used in pair trade analysis courtesy of BofA Merrill Lynch US high yield and Corporate Master Total Return Indexes. Treasury data from Barclays.

Summary

Junk debt is highly correlated with economic activity and stock market returns. When potential default rates are considered with signs that the economic cycle is turning, and extreme equity valuations, investors should be highly attuned to risks. This is not to say junk bond holders will suffer, but it should raise concern about the amount of risk being taken for a marginal return at best.

If you have owned junk debt for the last few years, congratulations. You earned a return greater than those provided by more conservative fixed-income investments. That said, we strongly recommend a critical assessment of the trade. Math and historical precedence argue that the upside to holding junk debt is quite limited, especially when compared to investment grade corporate bonds that offer similar returns and expose the investor to much less credit risk.

At RIA Advisors, we have sold the vast majority of our junk bond holdings over the last month. We are concerned that the minimal spread over Treasuries does not nearly compensate our clients enough for the real risk that the current economic cycle is coming to an end.