With the current economic expansion now nearly ten years old and the stock market days away from being the longest bull market in modern U.S. history, the only way to characterize the current environment is ?*late cycle*?. Economic growth has recently improved, predominately thanks to a surge in fiscal spending and tax cuts but higher volatility and tighter monetary policy should raise concerns about the durability of the U.S. economy?s winning streak. Among the asset classes that would be most affected by a change in the contours of this expansion, high yield corporate bonds (a.k.a. junk debt), those rated below BBB-, rank near the top. To analyze the risk/reward tradeoff inherent in this sector, the following article relies heavily on charts and tables of data. •You are invited to draw your own conclusions, we certainly have ours.

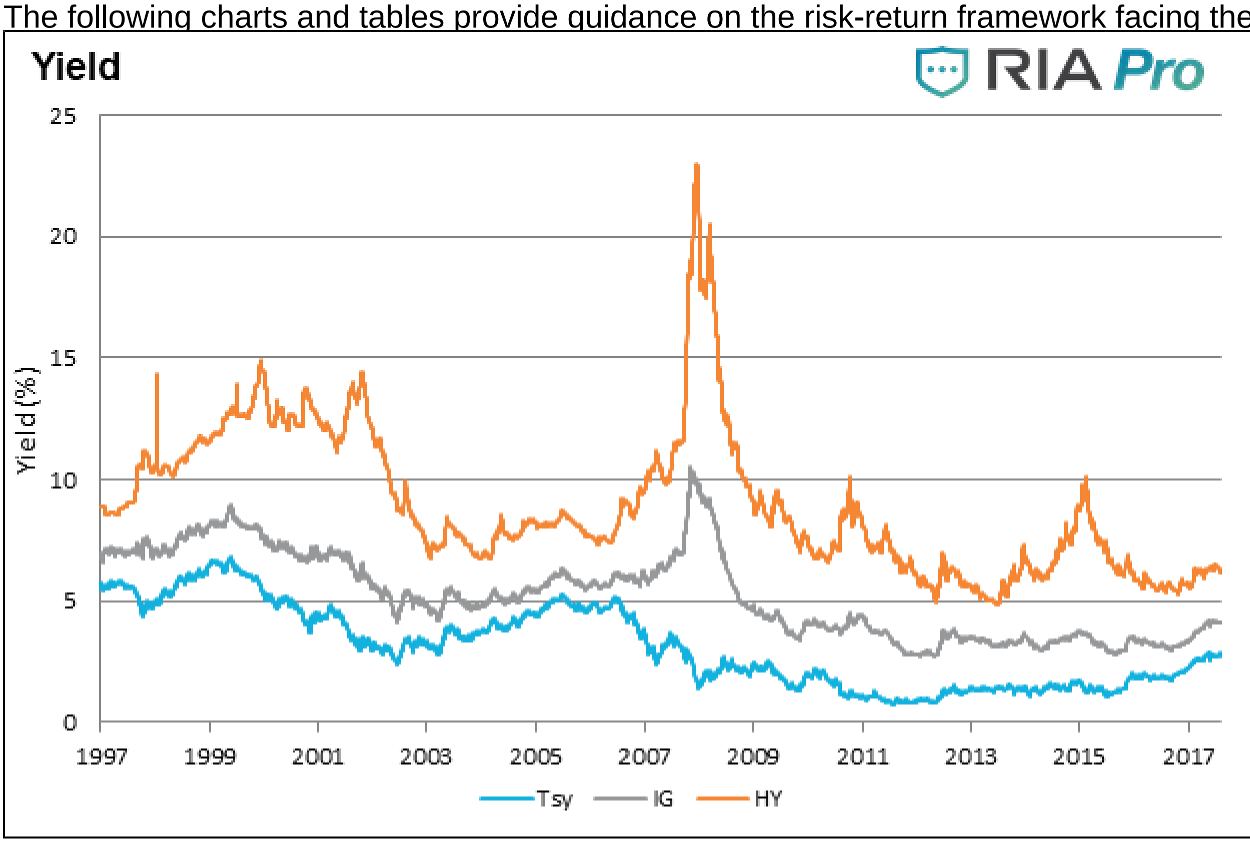
Current Circumstances

Despite credit concerns in the retail sector in 2017, the high yield credit sector generated a 7.30%

total return for the year. The strong performance continued in the first few weeks of 2018 as witnessed by a healthy 0.60% gain. The sudden surge in equity volatility at the end of January pushed returns in to the red. Like the equity market struggling to recapture January?s all-time highs, the high yield sector is in the black but not by much, having returned only 1.26% so far this year. Interestingly however, that performance ranks first among the major fixed-income categories as everything else except municipal bonds have negative returns for the year. To what does the high yield sector owe this status of best performer at this point in 2018? Technical dynamics explain most of the outperformance. High yield corporate issuers have provided much less supply in an environment where demand remains strong and despite the scare early in the year, volatility has returned to mid-January levels. Additionally, the recent boost in corporate earnings growth is providing fundamental support. Lastly, the high yield sector in general has a shorter duration (risk) profile than the investment grade sector. This combination of circumstances has helped keep high yield spreads tight to other fixed income assets, an indicator reflective of investor optimism about the economic cycle and the expectation that defaults should remain historically low. Counter to the bullish argument, the question of broader problems potentially evolving out of the disruption currently being observed in the emerging markets should not be entirely dismissed. Emerging market economies, and for that matter many developed nations? economies, appear to be slowing. Liquidity and lending conditions are tightening due to higher U.S. interest rates, reduction of the Federal Reserve balance sheet and rising U.S. Treasury issuance. Further, the combined effects of a stronger U.S. dollar, inflation concerns and protectionist measures being taken by the U.S., raise the overall level of uncertainty in the domestic and global economy. Although some of those concerns are peripheral to the U.S., history has proven it is a short walk to the doorstep of contagion.

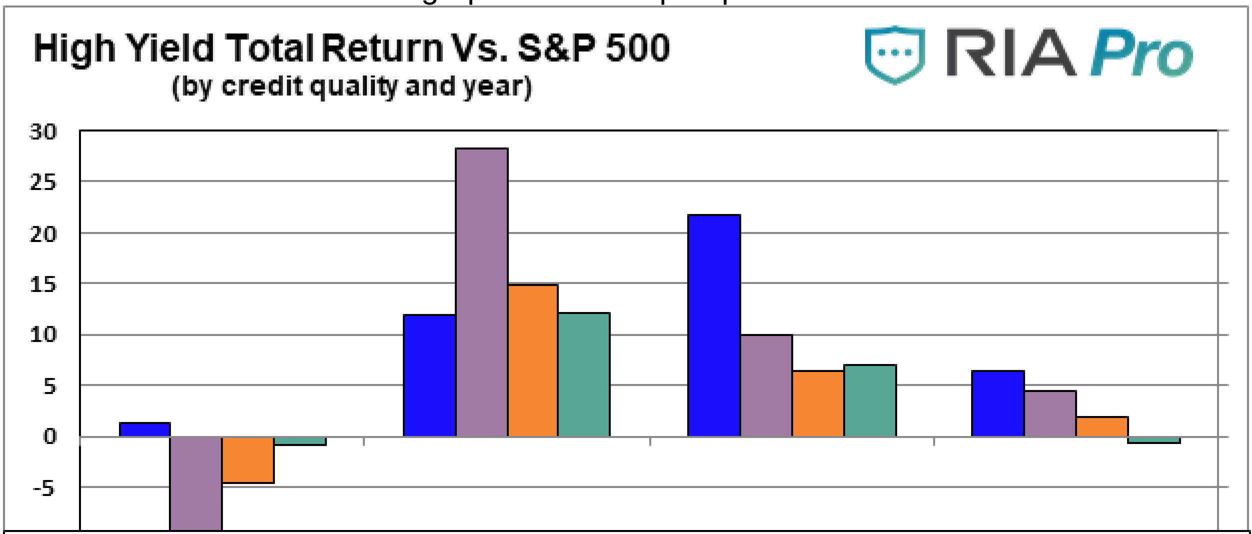
High Yield Analysis

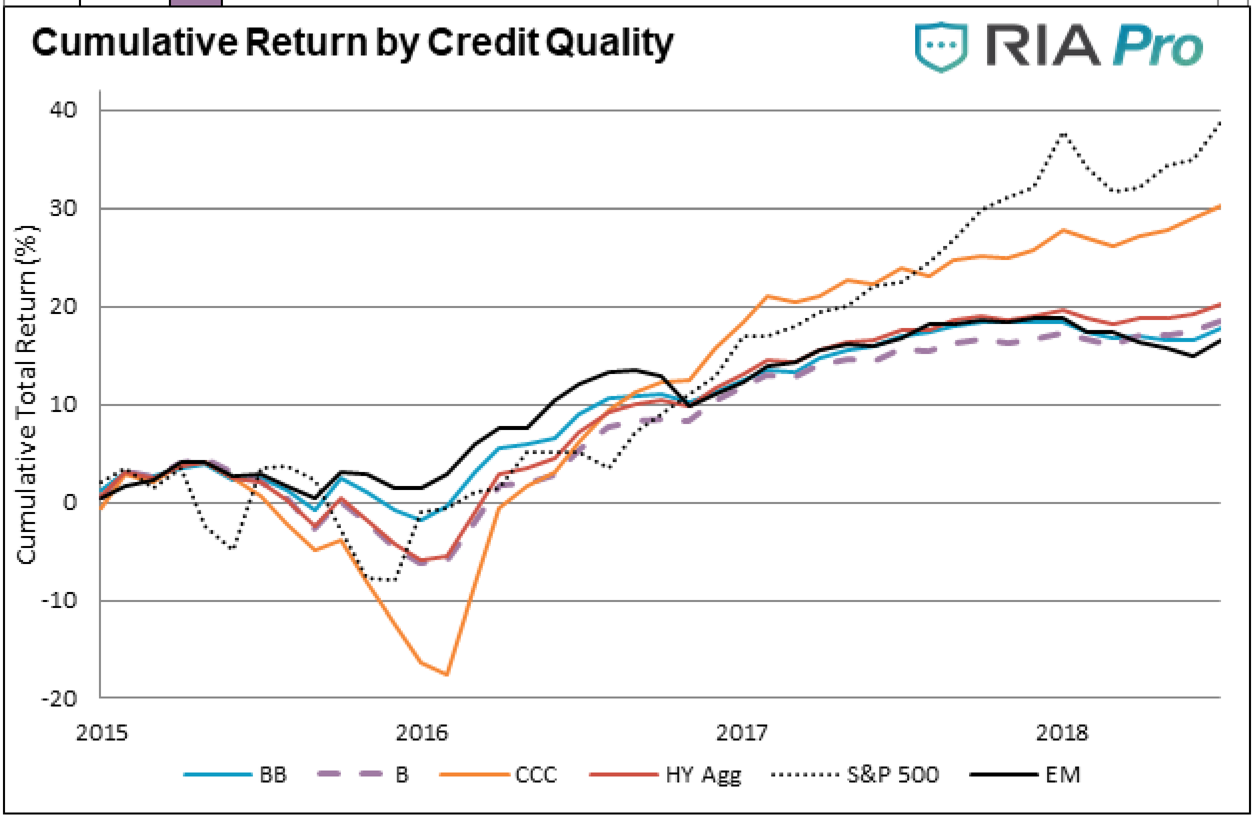
The following charts and tables provide guidance on the risk-return framework facing the high yield ys, Y) yields, igns of



The next

two charts offer insight into the recent performance of high yield credit. The first illustrates total return performance by year and the second is cumulative returns since 2015. Emerging market credit is added to the second graph for further perspective.





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strong historical relationship with equities, the next chart highlights monthly high yield total returns and their relationship with monthly changes in equity volatility. Based on the data, a ten-point

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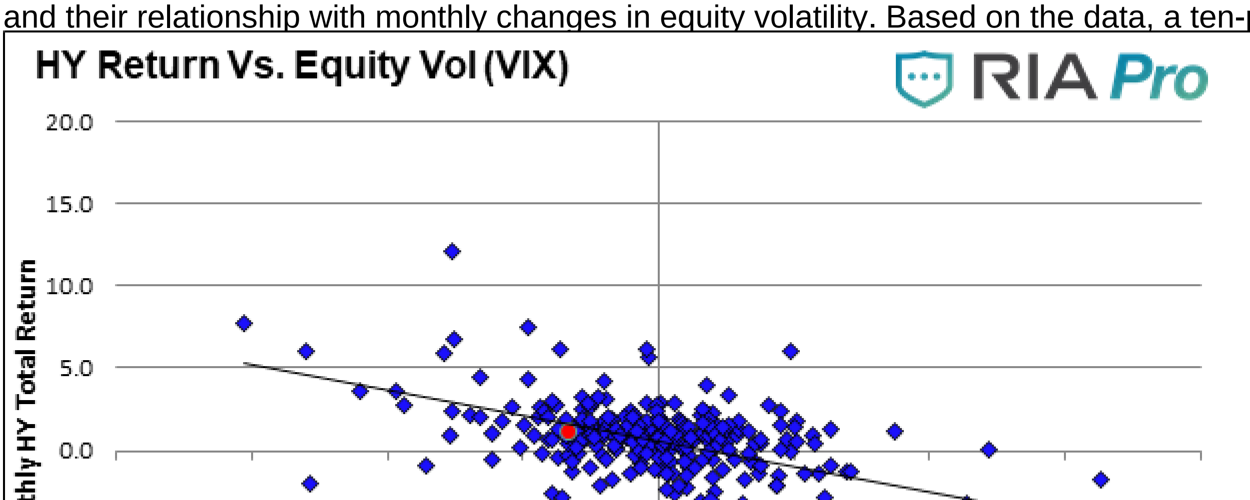
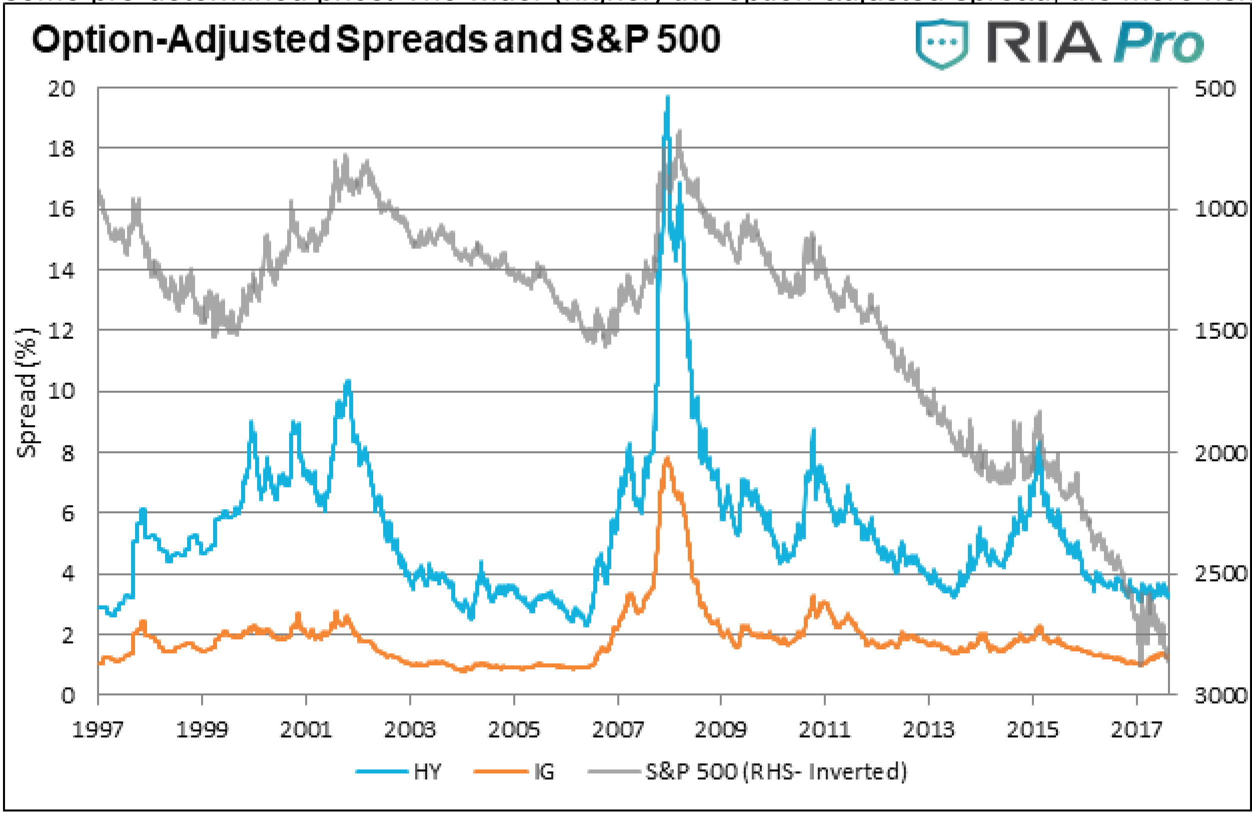


adjusted spreads (OAS) reflect the difference between various credit instruments and the risk-free rate which is normally the comparable U.S. Treasury security. It not only accounts for the credit risk and interest rate risk but also factors in the optionality or risk that the issuer can call the bond at some pre-determined price. The wider (higher) the option-adjusted spread, the more risk the



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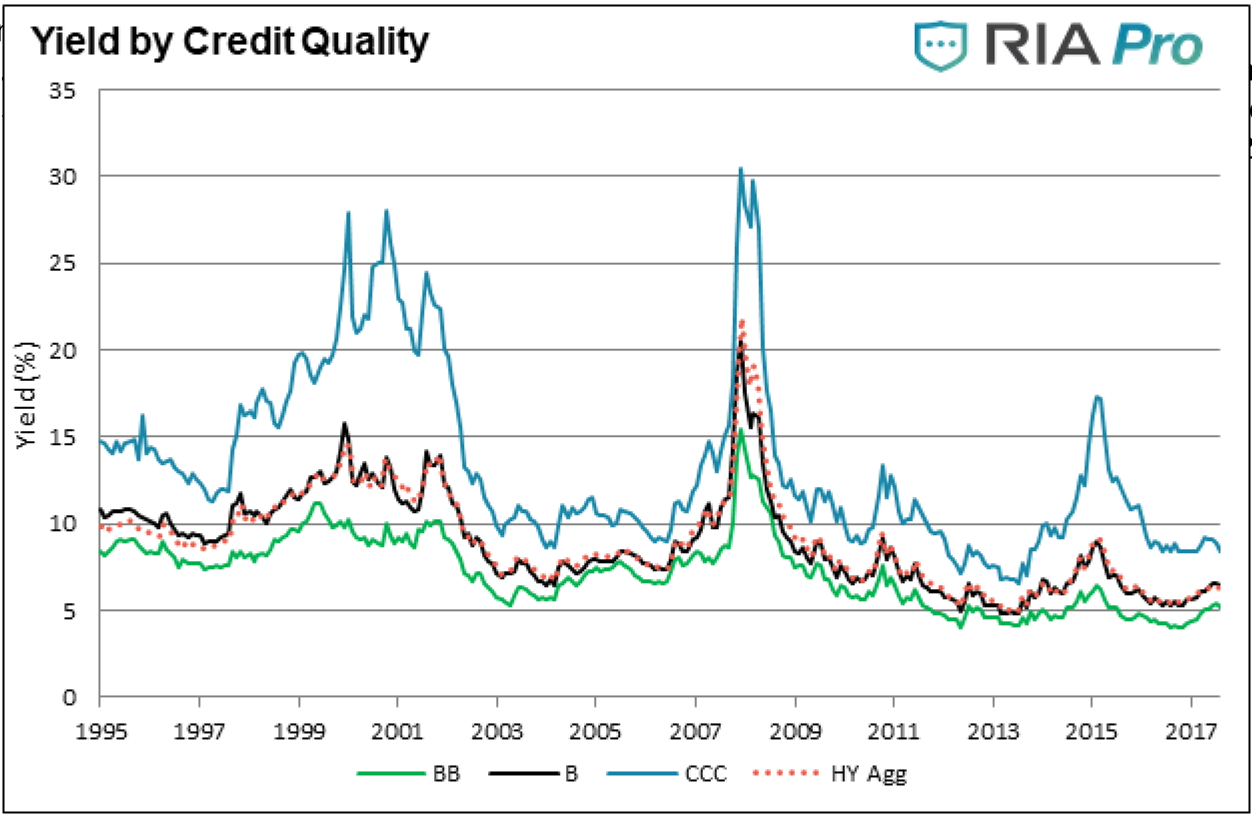

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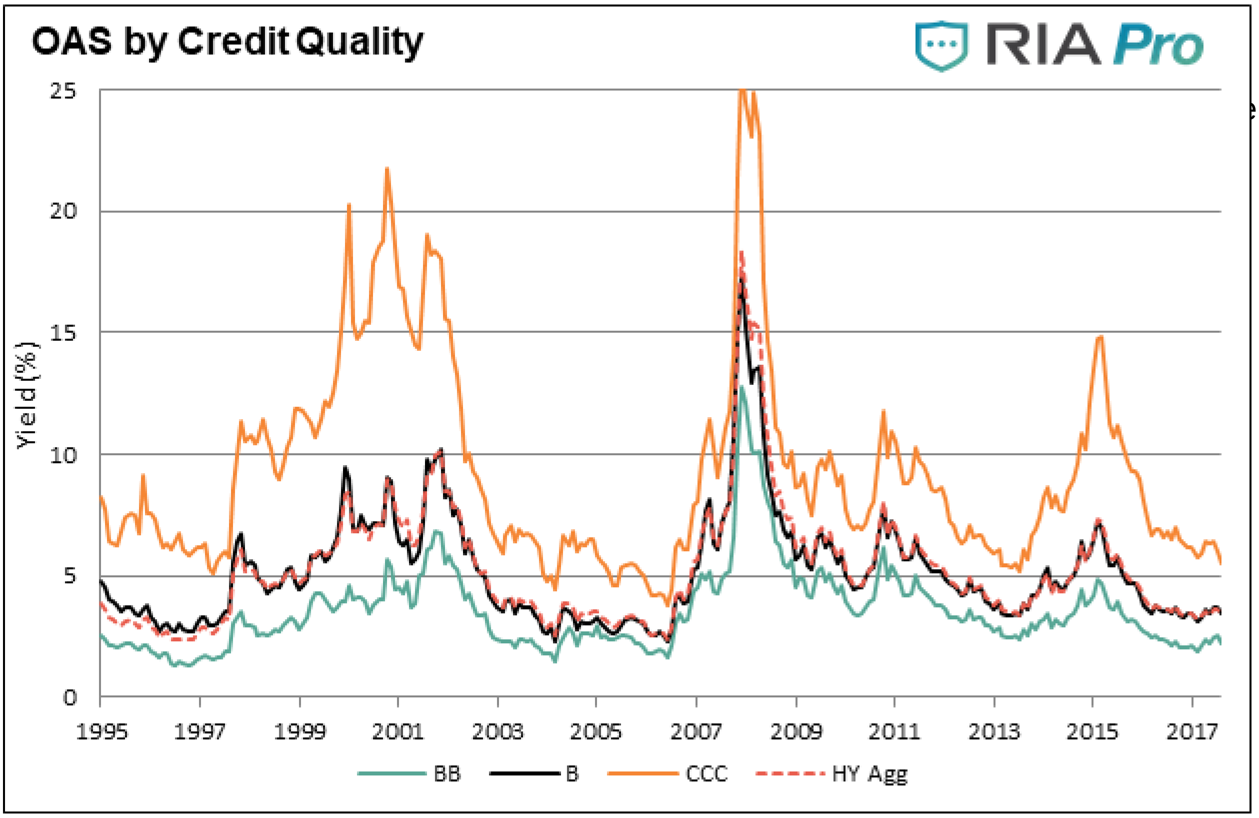

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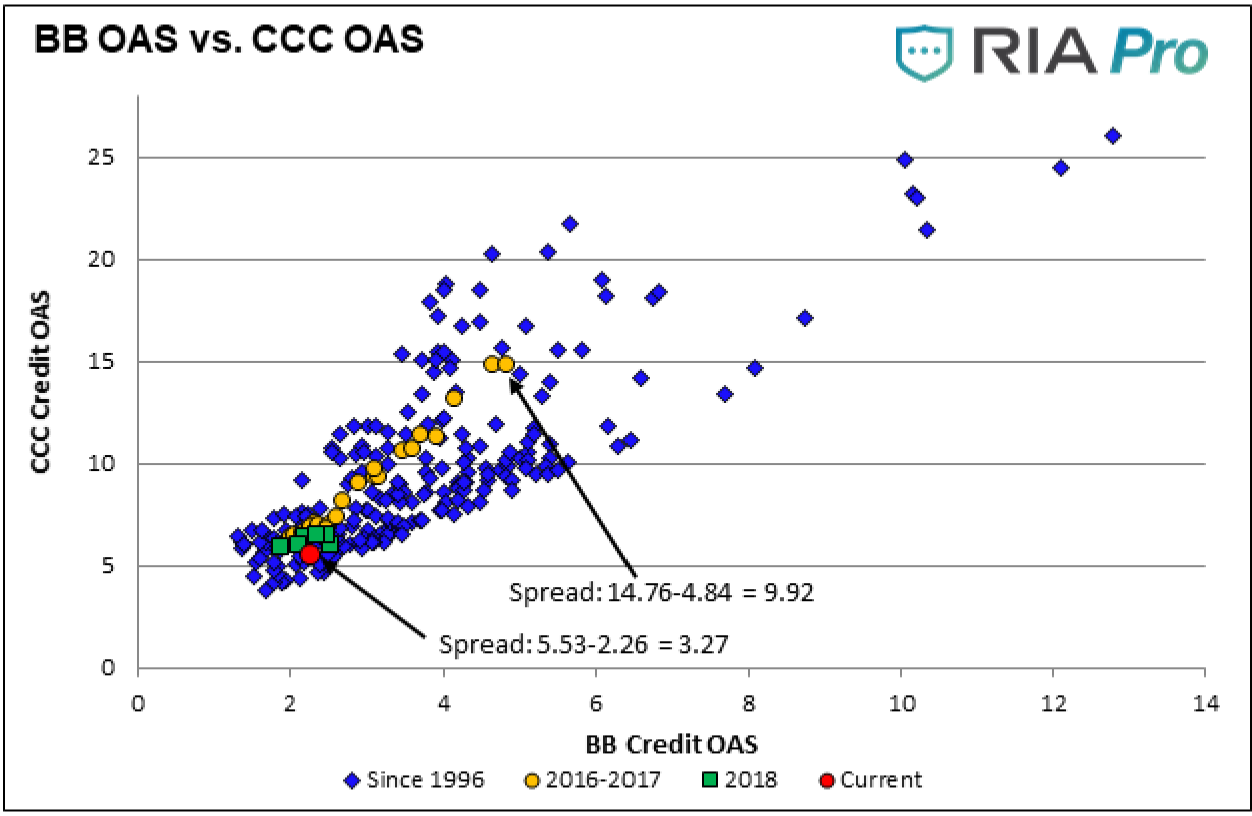

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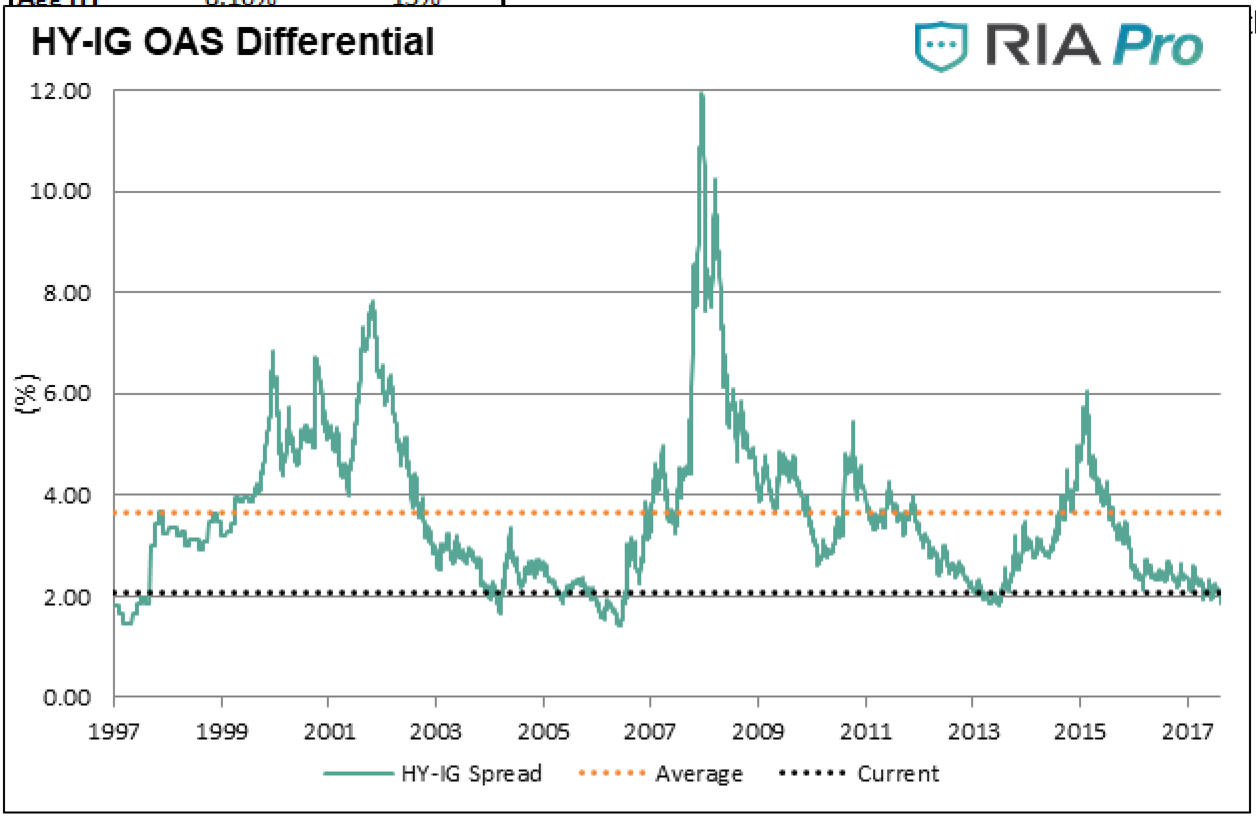
the reasons for the lower quality bond outperformance may be the continuing strength of the economy which minimizes investor default concerns, as well as the reduced issuance/supply of CCC bonds relative to demand. **Regardless of the reason, investors should be concerned as lower-rated bonds CCC bonds historically demonstrate much higher levels of annualized volatility, largely because they present a much higher risk of default.**

	Annualized Return	Annualized Volatility
BB	8.50%	9%
BB	7.40%	13%
CCC	7.10%	30%
Agg HY	8.10%	15%



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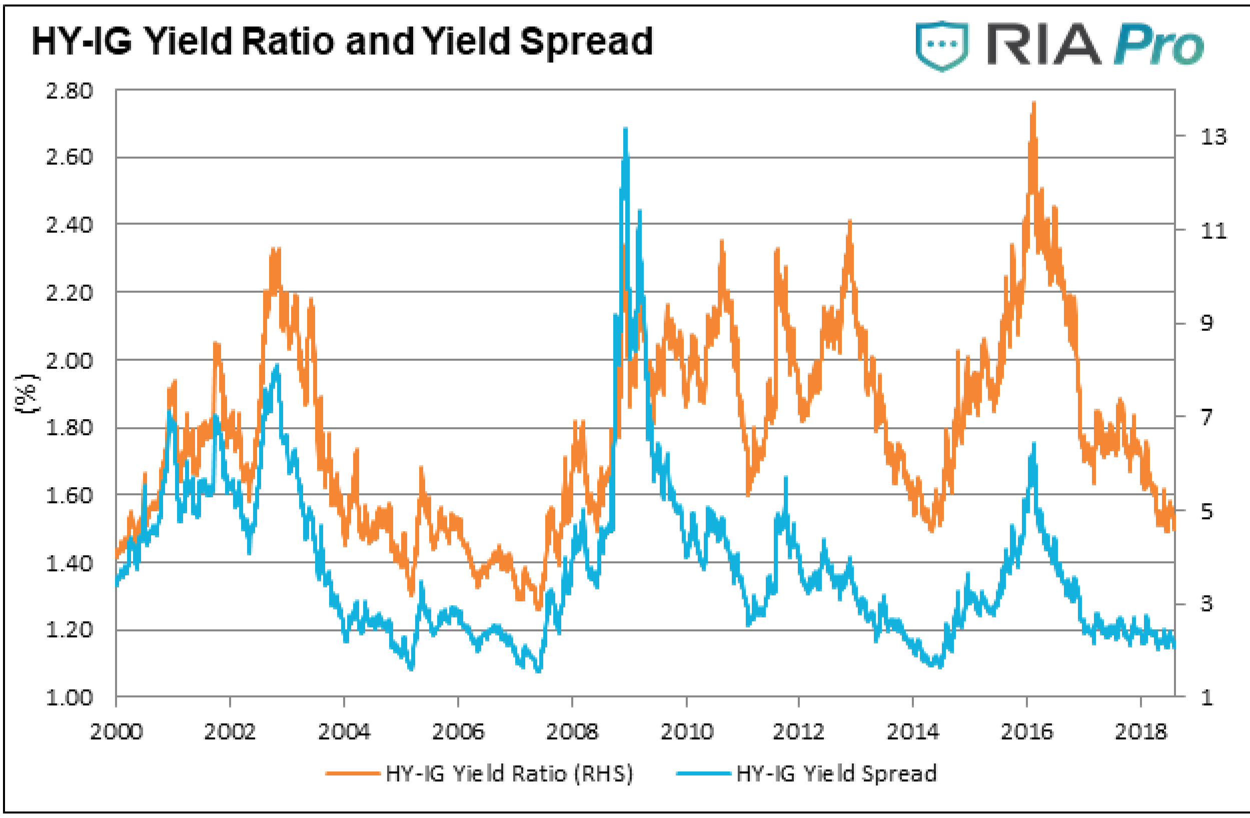

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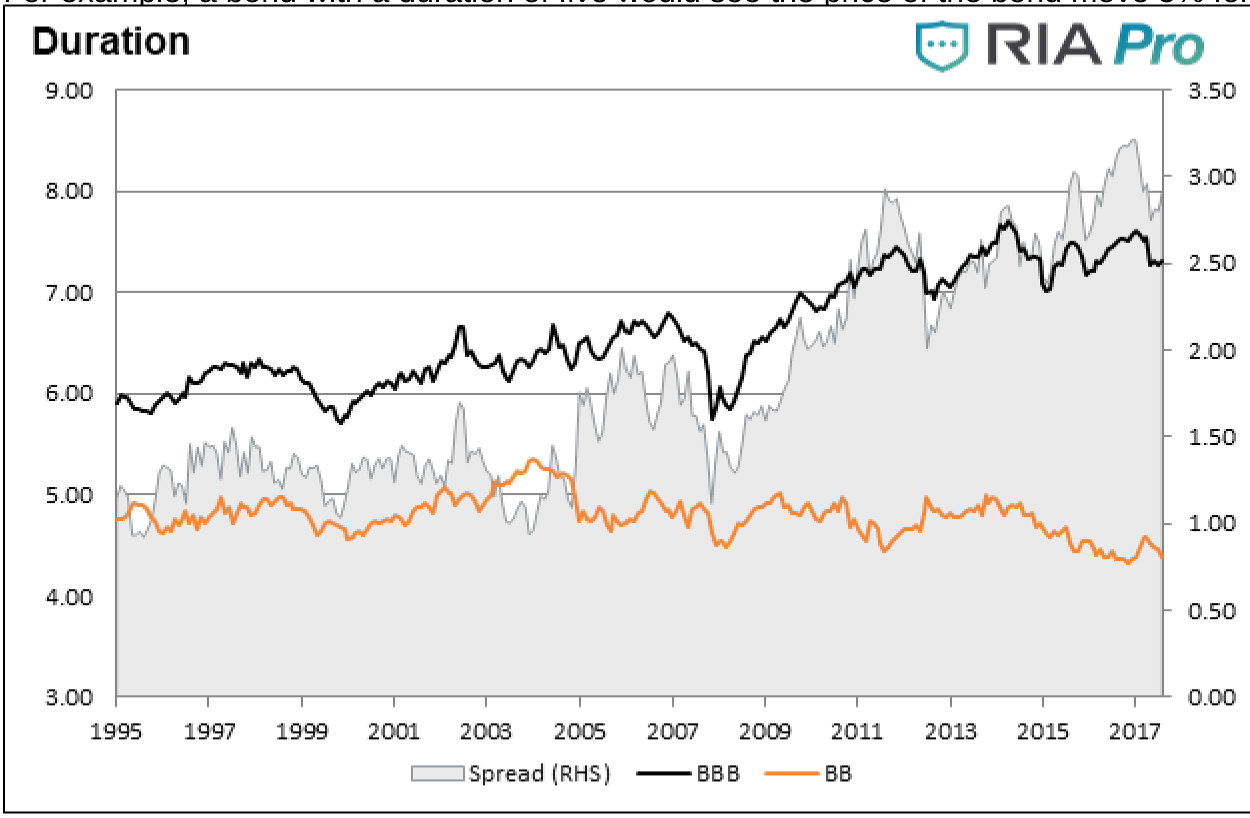
duration of a bond is a measure of price risk given a 1% (100 basis point) change in interest rates. For example, a bond with a duration of five would see the price of the bond move 5% for every 1%



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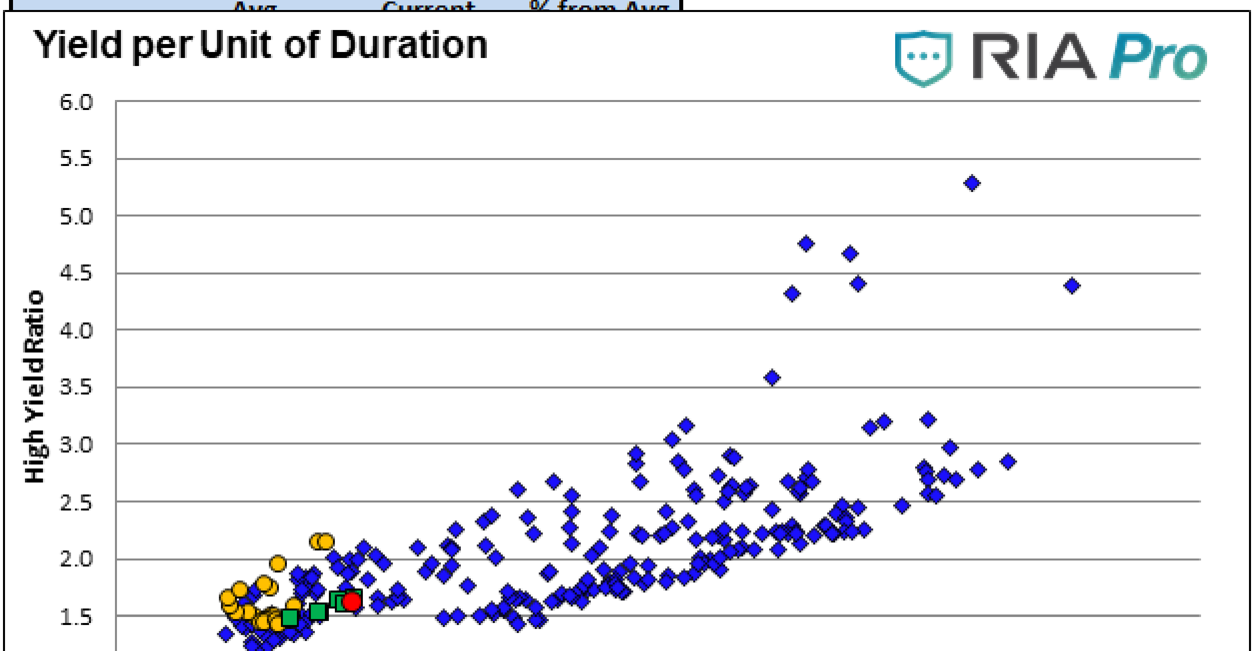
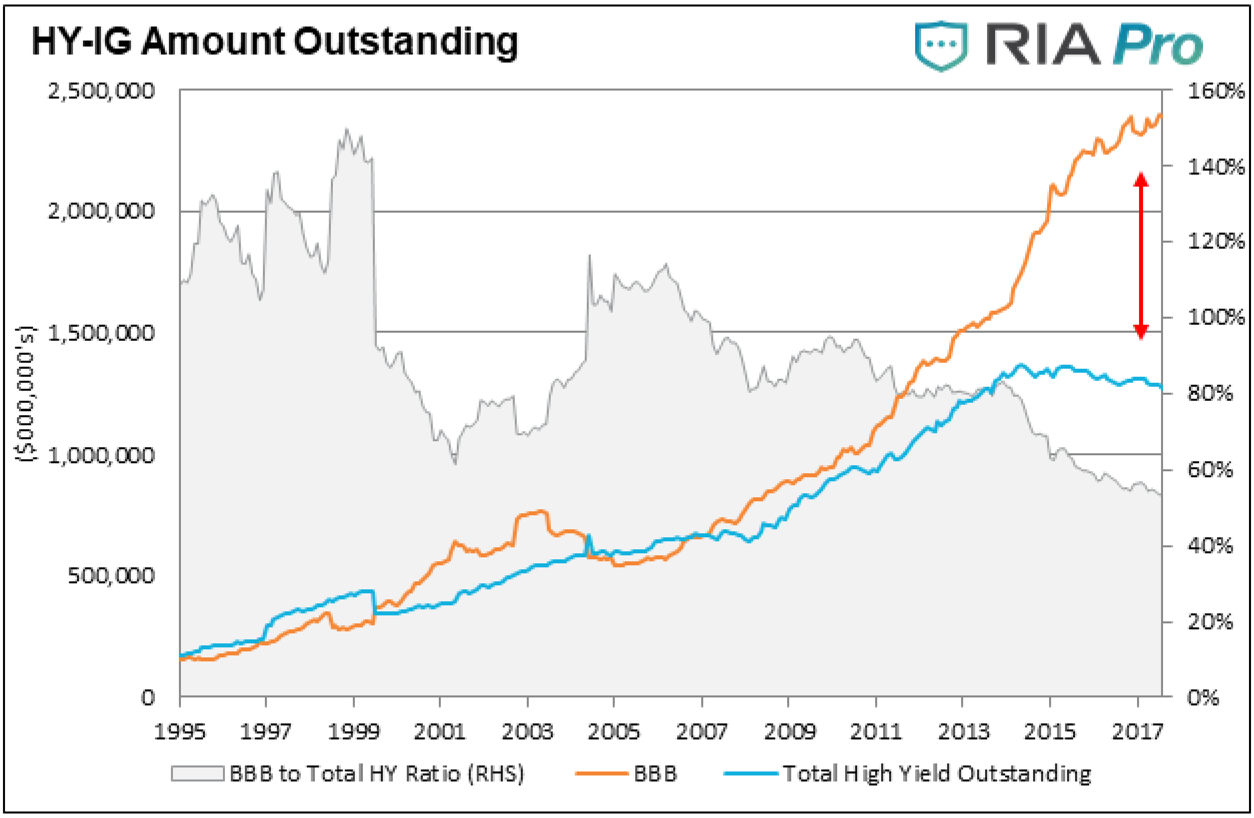
useful metric to gauge relative value is yield per unit of duration. This is conceptually similar to the Sharpe Ratio. Overall investment grade credit issuance generally has a longer duration as higher quality issuers can more easily and cost effectively issue bonds with longer maturities. The long-term average (since 1989) duration for IG is 6.1 years and the average yield is 5.82% which means the average yield per unit of duration is 0.95. For high yield, the long-term average duration is 4.4 years and the average yield is 8.98% for a yield per unit of duration of 2.04. As the table below demonstrates, current yield levels offer much less return per unit of duration risk for both IG and HY than the average. The combination of rising rates and shorter duration in HY, which helps limit the exposure of higher interest rates, may help explain why junk bonds appear more attractive using this measure relative to IG. The chart below the table offers historical context of this relationship.

Yield per Unit Duration			
	Avg	Current	% from Avg



mentioned, supply and demand dynamics play an important role in relative performance as the next chart highlights. Currently, IG issuance is much heavier than HY issuance, a divergence that accelerated in 2015. The shaded area in the chart is the ratio of the notional amount of high yield bonds outstanding relative to investment grade. **At 53.3% of IG outstanding, high yield supply is at the lowest relative level since 1995.**



Summary

At this point in the business cycle, credit cycle and emotional cycle, the low yields and tight credit spreads in the high-yield corporate sector point toward a definitive asymmetry in risk. **More bluntly, given the higher probabilities of default in high yield bonds, investors are taking on a lot of risk and are not being properly compensated for it.** This can certainly continue as investing is the only business where otherwise sane individuals pile into the store to pay ever higher prices and flee as prices collapse. The current dynamics reinforce that behavior and will further ensure the alternative scenario when prices commence lower. More importantly, the charts in this series argue that all measures of value across the full credit spectrum in absolute terms appear quite rich. Yield levels remain very low and credit spreads very tight. This analysis argues that if an investor is going to take their chances and remain invested in corporate credit, they should do so in an ?up-in-credit? manner. For example, own the double-B credits as opposed to the single-B?s and triple-C?s. Likewise, in the investment grade sector, own the double-A and single-A credit bonds as opposed to the triple-B bonds. The ?give-up? in yield for moving up in credit is minimal and the added protection of better quality securities is prudent especially at this late stage in the cycle. Without regard for how long it takes for spreads to normalize, risk management is very forgiving when valuations reach these levels. As a reminder, the diligent and patient investor is the rewarded investor who avoids large losses and continually compounds wealth.