

JANUARY 2016 NEWSLETTER

Dear Investor,

The Global Volatility Summit ("GVS") brings together volatility and tail hedge managers, institutional investors, thought-provoking speakers, and other industry experts to discuss the volatility markets and the roles volatility strategies can play in institutional investment portfolios. The GVS aims to keep investors updated on the volatility markets throughout the year, and educated on innovations within the space.

The Seventh Annual GVS is less than two months away! If you have not done so already, please register for the event on the website: www.globalvolatilitysummit.com. Space is limited.

Macro Risk Advisors has provided the latest piece in the GVS newsletter series enclosed.

Cheers,
Global Volatility Summit

2016 EVENT

The 2016 Global Volatility Summit is coming up on March 16, 2016 at Pier Sixty in New York City. Registration is now open and the agenda has been posted.

2016 MANAGER PARTICIPANTS

Argentière Capital
BlueMountain Capital
Capstone Investment Advisors
Capula Investment Management
Ionic Capital Management
Man AHL
Parallax Volatility Advisors
PIMCO
Pine River Capital Management
True Partner Capital

KEYNOTE AND GUEST SPEAKERS

The 2016 keynote speakers are Barney Frank and Marcus Luttrell. Barney Frank served as a US Congressman for over 30 years and most recently as the Chairman of the House Financial Services Committee from 2007 through 2011. He was a key author of the Dodd-Frank Wall Street Reform and Consumer Protection Act. Marcus Luttrell is a decorated Navy Seal and best-selling author of Lone Survivor. You can access their biographies and more information about the event on the website: www.globalvolatilitysummit.com.

Energy Prices, Credit Markets and Risk Taking

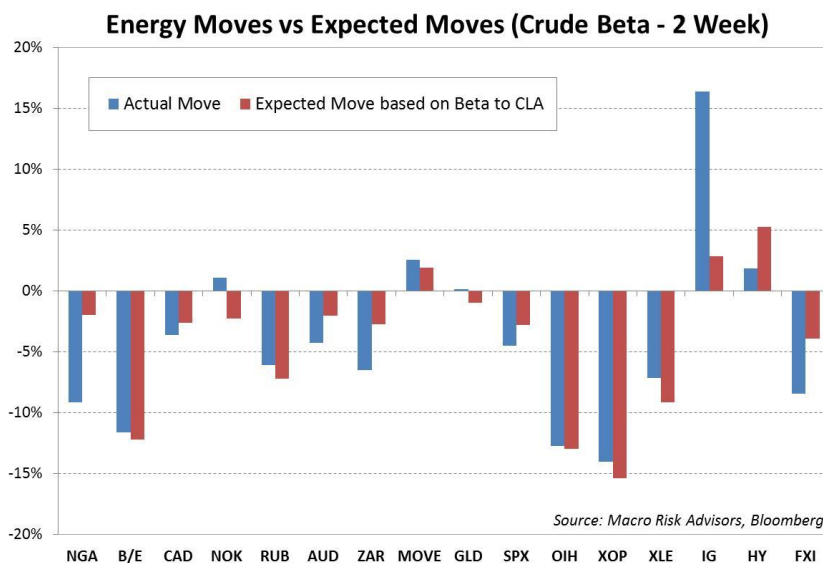
Introduction

In 2015, the price of crude oil declined by 30%, with realized volatility of 47%. The impact of faltering crude prices was important not just for energy market participants, but for investors globally across asset classes. As crude prices fluctuate, headline inflation moves up and down, forcing central bankers to respond with more or less policy. This in turn impacts FX, the shape of yield curves, and cross-asset implied volatilities. The fiscal profiles of entire countries are built around the price of crude. And perhaps nowhere has the recent energy price weakness been more critical than in the US credit markets, as 20% of the \$1.6 trillion US HY market is concentrated in energy.

2015 was a highly challenging year for high yield as an asset class. Eroding fundamentals, worsening liquidity, and news of the liquidation of several mutual funds all played a role. Yet for much of the year, even as credit spreads widened, equity prices remained remarkably resilient. At 6.4% of the S&P, the energy sector has less than half the influence it had on the index in 2008. However, history shows that high-yield spreads have a tight relationship with equity volatility, and any dislocations between the two tend to resolve themselves. In this piece, we offer context on the relationship between crude and credit markets, how this has altered recent investor behavior, and the potential opportunities that have emerged.

What's Happening?

In the chart below, we bring the “crude centrality” of risk to life by showing actual versus expected moves in crude based on beta relationships. This is over the 2 week period since 2016 began.



For much of the past year, credit widened more than crude suggested it would. Now we have begun to see this relationship reverse as outflows have slowed and the energy sector has arguably been priced for highly negative outcomes. But ignoring this recent beta shift, it is hard to argue that the “repricing” of S&P volatility was not foreshadowed by substantial increases in risk premiums elsewhere. Perhaps plummeting commodity prices and widening credit spreads more accurately reflected the economic realities facing financial markets.

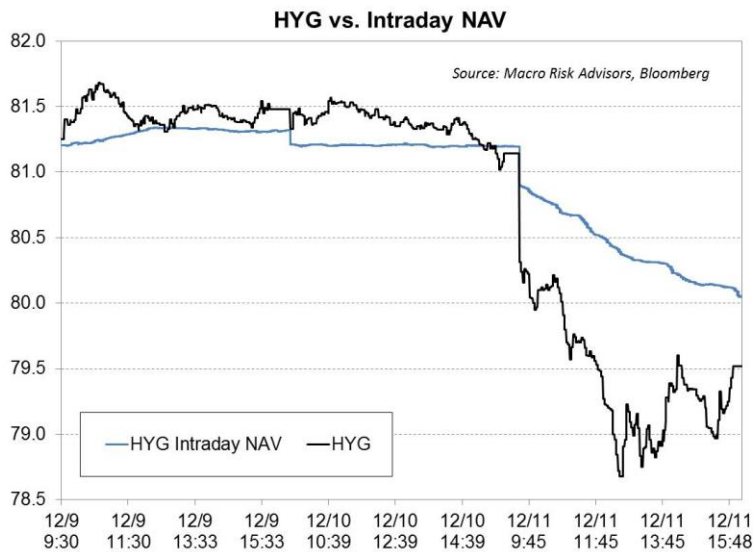
Even as equities rebounded strongly last fall following the late-summer selloff in 2015, credit markets still signaled lingering weakness especially among lower quality paper. In fact, spreads between BB and CCC rated corporate bonds reached in excess of 850bps. An oft cited factor for this spread decompression has been the structural shift in bond liquidity as dealer inventories have been constrained in the current regulatory environment. With intermediaries less able and willing to warehouse risk, this new regulatory framework being forced upon the market has resulted in unintended consequences.

Well publicized liquidity concerns were exacerbated by news in December that Third Avenue Management closed its \$788B Focused Credit mutual fund and blocked redemption requests. With 75% of the fund’s positions in CCC-rated

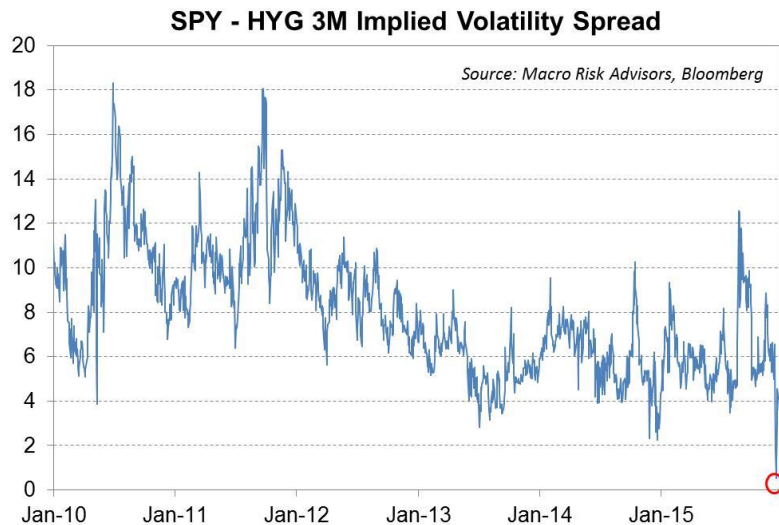
credits or below and 28% of the portfolio in the top-10 positions, this event underscored that the transparency of holdings in debt mutual funds could make targeting of illiquid, concentrated positions more acute than in previous cycles. At this juncture, the risk of large scale defaults seems limited without recession risk, but we are witnessing a technical re-pricing of credit as an asset class, with energy price weakness a major catalyst.

Credit Hedging

On December 11th, the iShares High Yield Corporate Bond ETF (HYG), sold off 2%, a 4 standard deviation move, and its biggest loss since 2011. The continued decline in energy had been weighing on high yield and news of Third Avenue barring redemptions in one of its funds worsened sentiment. As we show in the chart below, HYG traded well below NAV intraday on December 11th and closed 71 bps below on that day. Indeed, more shares changed hands in HYG that session (54 million) than any other day in its existence! Of concern for many is the apparently better liquidity in the ETF versus the underlying bonds that comprise it. Mohammed El-Erian has suggested that investors may have “collectively embraced a liquidity illusion”, underestimated the difficulty that may come from unwinding positions at a low cost.

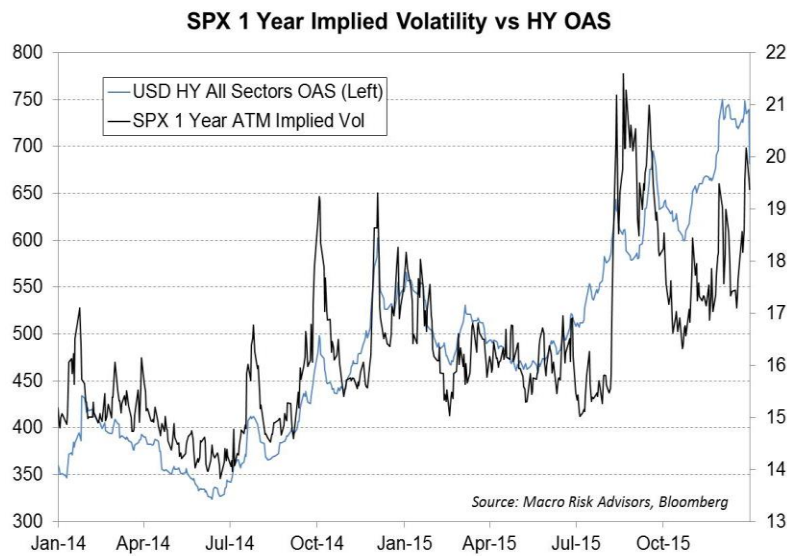


The forceful price action in credit pushed implied volatility in HYG to the highest level since the sovereign crisis of 2011. Implied volatility in the SPX usually trades at a 4-10 point premium to HYG, but following this event, 3-month implied volatility in the HYG traded in line with that of the SPX, the first time this has happened since 2008. It was a deepening of the financial crisis that sent equity volatility rocketing higher that resolved this spread in 2008.



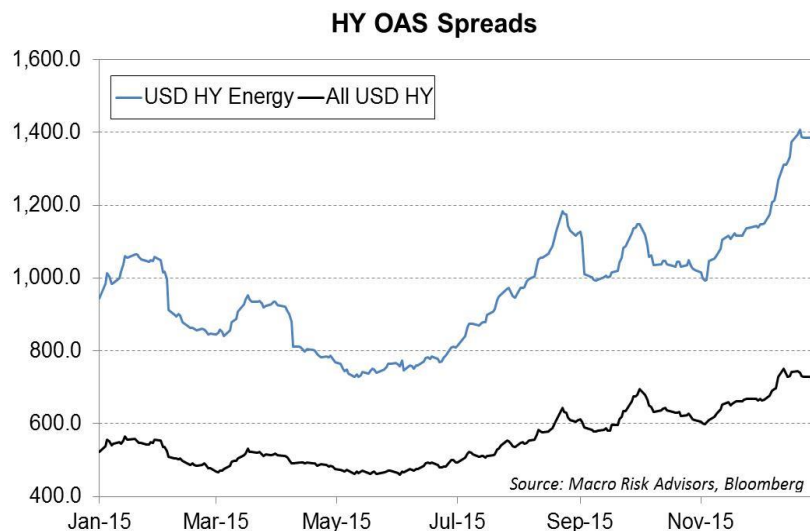
How do we account for the collapsing spread in the option price of an equity versus credit index? Insight may be found in the active migration to HYG options as a hedging instrument as liquidity has improved. When considering correlation to their bond portfolios, prominent funds ([LINK](#)) have voiced frustration about the composition and effectiveness of hedging with CDX HY, a basket of credit default swaps on HY debt. Since the energy selloff began, there have been instances when broader measures of spreads widened, reflecting the balance sheet stress of lower crude; meanwhile, CDS spreads on the CDX HY were actually *tightening*. Not surprisingly, starting from late 2014 the volume of CDX HY traded has diminished, likely because of concerns around its effectiveness as a hedging vehicle. The liquidity trend in HYG has mirrored this decline. In 2015, 12.4 mln contracts traded in HYG options, a new record.

In the following chart, we map one year implied volatility in the SPX to HY OAS spreads. We use Bloomberg's index of all USD HY bonds (as opposed to the narrower CDX HY index). Acknowledging that there are important index composition differences between the SPX and HY indices, this chart provides context on the equity volatility versus credit spread relationship. Equity implied volatility levels now look roughly in-line with HY credit spreads. However, it is the implied volatility of *credit products* like the HYG that is still quite high relative to that in the SPX.



A closer look at HYG

Compared to equities and commodities, high yield began 2016 in relatively stable fashion. In fact, in early January, high yield energy spreads were actually in from the widest levels in December despite the carnage in oil.



Breaking the HYG out into sectors, we find that energy is a 10.6% weight in HYG, and that the weighted average energy bond in HYG is trading at 75.8 cents on the dollar – a much greater discount than in any other sector. The option-adjusted spreads are also the widest of any sector. Excluding energy, the weighted average bond price is 97.0 with an OAS of 540 bps.

HYG Breakdown as of 1/11

Sector	Weight	Wgt Avg Price	Wgt Avg Coupon	Wgt Avg Duration	Wgt Avg OAS
Basic Materials	4.8	87.2	6.74	3.97	971
Communications	25.6	95.7	6.71	4.32	594
Consumer, Cyclical	12.0	98.9	6.26	4.07	475
Consumer, Non-cyclical	16.8	98.3	6.34	4.41	493
Diversified	0.6	100.2	6.84	4.52	474
Energy	10.6	75.8	6.44	4.60	1324
Financial	12.7	101.3	5.80	3.77	376
Industrial	7.7	96.8	6.36	4.11	549
Technology	4.9	97.2	5.89	4.68	466
Utilities	3.7	92.6	6.60	4.56	689
All (non cash)	99.4	94.8	6.38	4.26	624
Ex Energy	88.9	97.0	6.37	4.22	540

Source: Macro Risk Advisors, Bloomberg

Based on energy's index weighting, the HYG would suffer roughly a 3% loss if all energy bonds were to decline to 50. The worry, of course, is that these do not sell off in isolation and the sell-off in energy sponsors deterioration of risk sentiment that feeds into other sectors. Still, it illustrates that, in isolation, energy may not be able to hurt HYG much more from here.

2015 is a strong lesson in cross-asset risk. While some risk events are idiosyncratic to particular markets, it has proven critical for investors to pay careful attention to the risk dynamics in sister asset classes. There are instances in which the signals emerging from one asset class or geography provide valuable information about what might come next to the market an investor cares most about. In 2015, the tremendous volatility and price erosion in crude oil sent shock waves to other markets. The substantial debt taken on during the boom years in energy left credit markets especially vulnerable to the risk explosion in crude. With the fragile state of liquidity in credit, investors were forced to contemplate new hedging strategies, with the HYG becoming a more prominent vehicle to manage risk. With incredible volatility in crude already in 2016, this trend in HYG usage has continued. The track record of the growth of other listed option products suggests that it is often the case that liquidity begets more liquidity.

~ Dean Curnutt is CEO and Evan Karp is Salestrader at Macro Risk Advisors

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