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Turning stocks into bonds

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The search for yield has driven many income investors into unfamiliar territory. Low yields on perceived safe assets have led many to embrace more credit risk. And some have ventured beyond the bond markets – not just into dividend-paying equities – but also options-selling strategies in equities. Such strategies don't literally turn stocks into bonds, but they do create similar risk profiles: limited upside potential with plenty of downside. This month we delve into the links between credit spreads and equity volatility – and revisit our late-October downgrade of U.S. credit to neutral.

Highlights

- The risk of loading up on credit and extracting income by selling volatility rises disproportionately as credit spreads narrow and vol falls further. These strategies offer a high probability of small gains with a small chance of large losses.
- Today's low-volatility regime could last a long time – especially against a backdrop of economic stability. Reaching for yield through credit and selling options can be self-reinforcing, driving volatility lower on the way down, but exacerbating any reversals on the way up. We think this risk bears watching.
- The economic backdrop is supportive of credit but we prefer to take risk in equities. Within credit we advocate an up-in-quality stance. And we see interest rate normalization by the Federal Reserve gradually restoring the attractiveness of lower-risk fixed income sectors, reducing investors' temptation to stretch for yield.

Widening credit spreads; volatility up

The risk-on tone has taken a breather in November, with credit spreads widening after hitting post-crisis tights. Similarly, equity volatility (the VIX) bounced off an all-time low, while the U.S. Treasury yield curve has flattened to levels last seen in 2007.

Bond market summary

Sector	View	YTD return	Yield
U.S. aggregate	—	3.26%	2.64%
U.S. government bonds	▼	2.39%	2.06%
Short (1-5 years)	—	0.90%	1.80%
Intermediate (5-10)	▼ ↓	2.55%	2.21%
Long (10+)	▼	7.63%	2.72%
U.S. inflation protected	▲	2.39%	2.30%
Agency mortgages	—	2.36%	2.87%
Non-U.S. developed	▼	8.76%	0.76%

Sector	View	YTD return	Yield
U.S. municipal bonds	—	5.24%	2.25%
U.S. investment grade	— ↓	5.33%	3.25%
U.S. high yield	—	6.05%	5.97%
Bank loans	—	3.51%	5.19%
Securitized assets	▲	3.44%	2.70%
Euro credit	▼	2.59%	0.68%
Emerging markets	—	8.53%	5.37%
Asia fixed income	—	5.57%	3.85%

▲ Overweight — Neutral ▼ Underweight ↑ Upgrade ↓ Downgrade

Source: Bloomberg, as of November 15, 2017. Notes: Performance and yields are represented by the S&P Leveraged Loan Index (bank loans); J.P Morgan EMBI Global Diversified Index (EM hard-currency debt), J.P. Morgan Asia Credit Index (Asia fixed income), and the respective Barclays Bloomberg indexes for the remaining sectors. Yields are yield to maturity, except U.S. high yield and municipal bonds (yield to worst). Performance is measured in total returns and in U.S. dollars, except for Euro credit (euros). Our TIPS view reflects relative performance vs. nominal Treasuries. Indexes are unmanaged and used for illustrative purposes only. They are not intended to be indicative of any fund or strategy's performance. It is not possible to invest directly in an index. Past performance is no guarantee of future results.

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The link between credit and equity vol

Our recent downgrade of U.S. credit reflects a preference for taking economic and related corporate risks in equity versus debt. We do not view corporate credit in isolation – or in comparison only to the fixed income alternatives. Our asset view recommendations contemplate asset allocation across both debt and equity. We see better prospects for equities in an environment of steady economic expansion, easy financial conditions and strong corporate earnings.

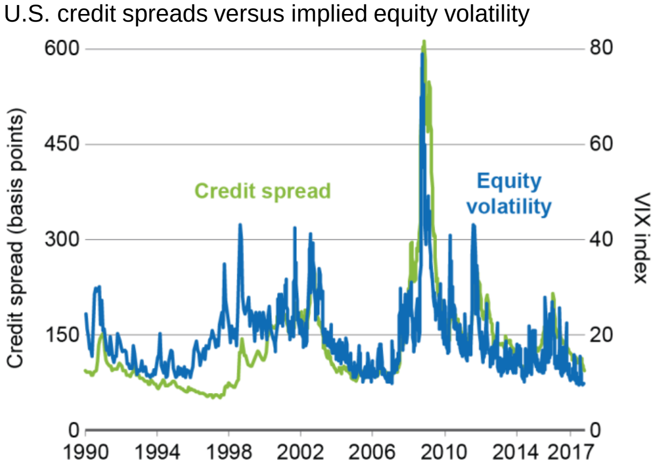
Valuations also matter. Credit spreads have tightened globally and U.S. credit spreads are at the narrow end of their 17-year range against government bonds – even after a recent widening. When credit spreads are this tight, even a relatively small sell-off can wipe out the income advantage of credit over government bonds.

Today's tight credit spreads reflect low levels of market volatility. Credit spreads historically have shown a close relationship with the VIX gauge of U.S. equity market implied volatility. See the *Joined at the hip* chart. And this is no coincidence: The credit and equity markets are intimately related. To understand why consider the payoff profile of corporate debt: In the best scenarios you get your money back and under the worst (the issuer defaults) you do not. That return profile is equivalent to bondholders having sold a put option on the value of the firm, an insight highlighted by Robert Merton's seminal 1974 work, On the pricing of corporate debt. Demand for liquidity also tends to decline in low volatility environments, another factor behind the relationship between credit spreads and volatility.

Low volatility regimes tend to persist, and today's low vol environment benefits from strong economic support, as detailed by my colleagues in Learning to live with low vol of July 2017. Yet today's realized levels of volatility stand at historically low levels – even for a low vol regime. This is true across markets. Such calm may mask vulnerabilities; the concentration of income-seeking strategies and their risks is a potential one worth keeping tabs on.

Joined at the hip

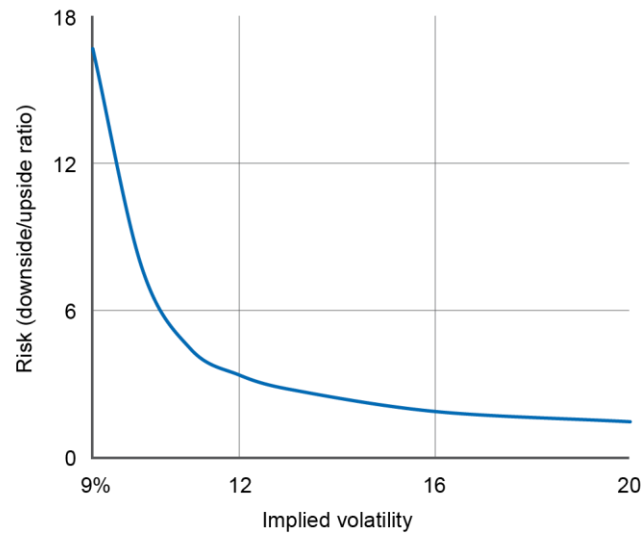
U.S. credit spreads versus implied equity volatility



Source: BlackRock Investment Institute, with data from Thomson Reuters, November 2017. Notes: Credit spread is represented by the option adjusted spread of the Bloomberg Barclays U.S. Aggregate Corporate Index. Equity volatility is represented by the Chicago Board Options Exchange Volatility Index (the VIX).

Selling my upside

Risk of a covered call-writing strategy at different vol levels



Source: BlackRock Investment Institute, with data from Bloomberg, November 2017. Notes: The figure shows the risk (defined as the ratio of the potential loss to expected gain at expiry of option) at different levels of S&P 500 implied volatility for a covered call writing strategy that varies moneyness to achieve a constant 3% annualized yield.

Selling options for income

Lenders, credit investors and insurance companies profit by accepting downside risk in exchange for some capped upside. The key to success is getting enough income (or premiums) for the risk. The same idea applies to volatility and credit spreads: selling options to generate income. In the case of the corporate bond, it's effectively an option on default. In a covered-call strategy – one popular way of generating income in the equity market – it's selling some of the upside return potential in a stock for income today.

Lower volatility and tighter credit spreads make it harder to generate income from such strategies. Investors' response has been to stretch their risk profiles to meet income goals. The dynamic is reflected in rising levels of corporate leverage and fewer protections for creditors – in capital structures that increasingly favor the interests of issuers.

In volatility we see similar dynamics. Consider a covered-call writing strategy that seeks to maintain a 3% annualized yield target. The investor owns a stock and sells call options on that same stock to generate income. In exchange for this income, the writer of the call gives away any potential upside above the option's strike price.

Lower levels of implied volatility mean less income from each call option sold. The investor needs to sell more valuable options to meet the income goal. In this case that means options with strike prices closer to today's level. But selling near to "in the money" options reduces investors' upside potential while maintaining all the downside risk inherent in owning a stock. The end result: Income-seeking investors in such strategies are accepting much greater risk for smaller gains. See the *Selling my upside* chart. This is a similar asymmetry of returns faced by credit investors today.

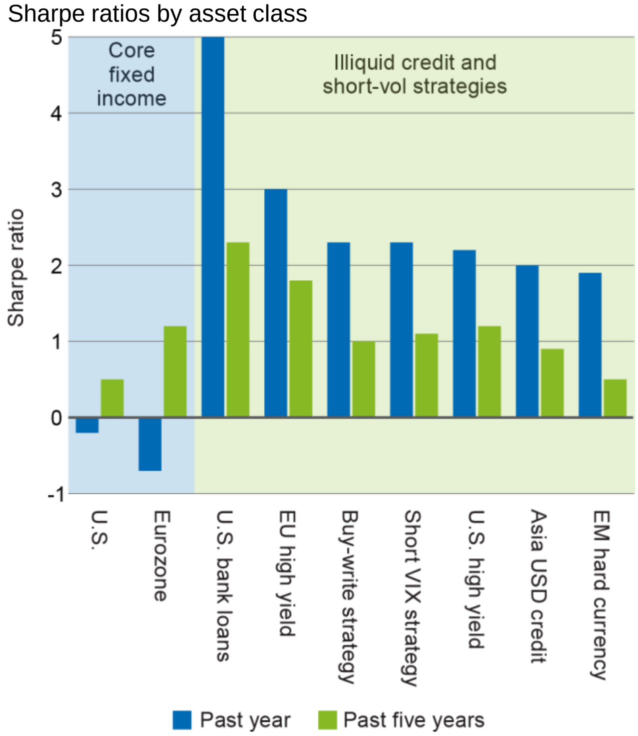
Selling upside – and downside

Another response to a low-volatility environment? Sell not only call options, but put options as well. Such short "straddle" strategies do well as long as stocks don't move significantly up or down. In other words, investors pocket income when stock volatility remains low. Such strategies have been immensely profitable in the post-crisis period. This reflects low and falling volatility – and the premium investors have been willing to pay for protection. Since the financial crisis, volatility has become an asset class unto itself. Rock-bottom yields and investors' post-crisis preference for income over risky assets are the reason. The result: on top of demand for traditional income funds, a proliferation of income-generating strategies in the options markets. These range from explicit short-vol strategies to covered call writing, straddles, strangles, "iron condors" and a multitude of structured products.

Short VIX and other option-selling strategies such as put or call writing have led to surging volumes of shorting options, reflected in a seven-fold rise in short VIX futures positions since 2011 according to CFTC data. Such strategies have been very profitable, as have many credit strategies. See the *Abnormal returns* chart, which shows the Sharpe ratio – a measure of risk-adjusted returns – for a variety of simple income strategies. Higher risk credit – with lower liquidity – and short options strategies have registered eye-popping Sharpe ratios that are well in excess of historical norms. Yet low realized volatility may be making these strategies appear less risky than they are, as we will explain on the right.

Abnormal returns

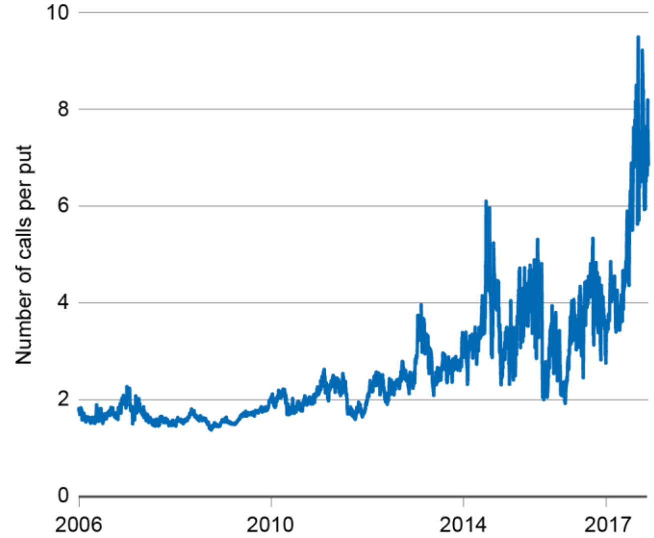
Sharpe ratios by asset class



Source: BlackRock Investment Institute, with data from Bloomberg, November 2017. Notes: The Sharpe ratio is the average weekly excess return divided by the volatility of returns. Indexes used: Bloomberg Barclays U.S. Aggregate, Bloomberg Barclays Euro Aggregate, S&P/LSTA Leveraged Loan, Bloomberg Barclays Pan-European High Yield, CBOE S&P 500 BuyWrite, S&P 500 VIX Short-Term Excess Return MCAP, Bloomberg Barclays US Corporate High Yield, J.P. Morgan JACI Diversified (Spread Return), J.P. Morgan EMBI Global Diversified (Spread Return).

Skew goes vertical

Number of call options per put option



Source: BlackRock Investment Institute, with data from Macro Risk Advisors, November 2017. Notes: The chart shows the price ratio of a three-month 95% put option and three-month 105% call option on the S&P 500 Index over time.

Consequences of low vol

The number of income strategies using options selling can in itself affect the observation of volatility. Why? The hedging behavior of those on the other side of these trades can lead to the selling of up moves in stocks and buying on dips. This itself dampens realized volatility. Lower realized volatility, in turn, leads to declining implied volatility. And that can create even greater selling pressure in a self-reinforcing process: Sellers of volatility need to sell progressively more options to meet income needs. One manifestation of this behavior can be seen in a huge spike in the relative pricing of out-of-the-money puts versus calls. See the *Skew goes vertical* chart.

Such increases in the skew typically reflect demand for insurance against downside risks, and we normally see the skew rise in periods of low volatility. But the rise in skew may also stem from persistent selling of upside calls to generate income. The latter interpretation points to potential financial vulnerabilities – even in a protracted period of low volatility. The lack of severe market shocks has led investors to sell volatility into any spikes. Such strategies can be vulnerable to more persistent bouts of uncertainty where a single spike is followed by more increases rather than declines. And at low levels of volatility, even small upward moves in uncertainty magnify the potential for losses. This is particularly true for leveraged forms of the short volatility trade.

Bottom line: The credit markets and income strategies in equity volatility are exposed to similar risks. We still see a role for credit in bond portfolios but overall, prefer to take economic risk in equities. The Fed's gradual interest rate normalization is improving the outlook for less risky income alternatives. This reduces the pressure for investors to reach for yield, as detailed in [Float like a butterfly](). Our higher quality fixed income preferences reflect this restoration in value.

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