

October 19, 2018 11:44 AM GMT

Credit Derivatives Research | North America

Liquidity Is a Virtue

We recommend patience and not buying the dip yet. Despite recent volatility, sentiment in credit has not turned materially bearish. Liquidity conditions are likely to tighten further through year-end, pressuring flows and weighing on credit markets, especially cash. We like CDX risk vs. cash/TRS.

Assessing the moves: From the tightens on October 1, CDX IG and HY spreads have widened 9bp and 40bp respectively, whereas IG and HY cash spreads widened 5bp and 35bp. While these moves are notable given the very low volatility in 3Q, CDX has been resilient compared to recent moves in the equity market and also relative to the sell-off in February. ATM spread volatility in CDX has risen by roughly 12% from the lows, but has lagged moves in equity volatility. HY TRS has outperformed CDX HY and comparable ETFs.

Sentiment still too constructive, fundamental risks ticking higher: In spite of the recent volatility, our sense is that sentiment in credit has not turned bearish in any material way to justify buying the dip. As an example, positioning data show that non-dealers still have more long exposure to CDX risk now than over the summer. In addition, through the recent volatility, rising sector-specific risks and idiosyncratic issues suggest that tighter liquidity conditions are starting to weigh on credit beyond simply the "technicals". And, while the impact of higher volatility may be priced into credit markets to a certain extent, the impact of a further tightening in liquidity conditions is not, especially in cash.

Move "up in liquidity" – long synthetic credit vs. cash: In our view, cash credit remains most vulnerable going forward, as higher rates/weak returns pressure fund flows and rising funding rates/currency hedging costs weaken the value proposition of US credit vs. global fixed income markets. While cash spreads have thus far been relatively resilient (especially IG), as we learned through prior sell-offs, credit investors may not sell initially given their ability to absorb outflows at first. But persistent outflows, potentially driven by a sustained tightening in liquidity conditions, could be self-reinforcing and likely mean the weakness in cash credit simply takes longer to play out.

Trade ideas: We like going long CDX HY 31 vs. selling December expiry TRS in IBOXHY with cash spreads at their richest valuation level vs. synthetics over the past three years. In IG, we prefer positioning for a more negative basis by switching from short-dated cash bonds into 5Y CDS. We also like positioning for a bearish range in CDX in the coming weeks using options. We recommend November expiry 1x2 payer spreads in IG and 1x1 payer spreads in CDX HY given very steep volatility skew. Finally, we also like funding HY TRS shorts with longs in Loan TRS, which should benefit from LIBOR moving higher.

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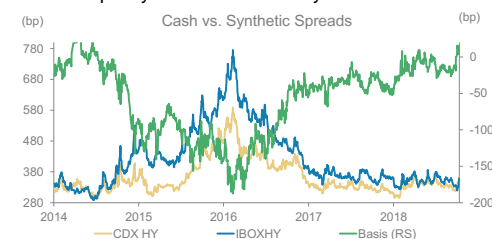
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Exhibit 1: After initial resilience in early February, cash credit underperformed for several weeks following persistent outflows and a widening liquidity premium



Source: Morgan Stanley Research, Markit

Exhibit 2: CDX HY spreads roughly in line with IBOXHY, suggesting that investors are not compensated for the weaker liquidity of cash bond vs. synthetics



Source: Morgan Stanley Research, Markit

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Introduction

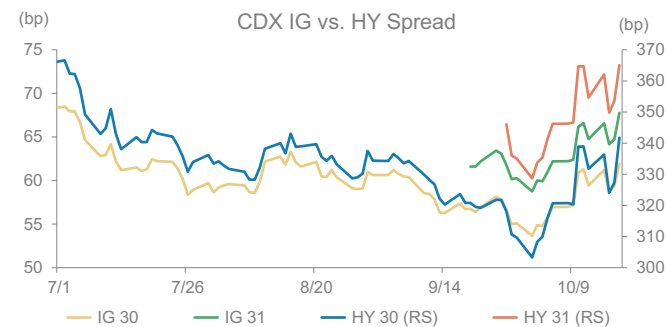
The recent weakness in US credit raises questions about whether this is a dip to buy for investors. In our view, investors may get a more attractive entry point before year-end, but as of now, it is still too early. Our view is predicated on three factors. First, despite recent volatility, sentiment in credit has remained quite constructive. Over the past two weeks, most questions we have gotten were centered on how/where to buy. Positioning data also suggests that non-dealers have more long exposure to the CDX indices today than through most of the summer. That is not usually the sentiment at the bottom of a correction. Second, unlike the sell-off in February, this time around, there is more evidence of rising sector-specific and idiosyncratic risks in pockets of the market (for example, weakness in certain cyclical sectors, signs of margin pressure, and China weakening starting to filter into some earnings releases). In other words, tighter liquidity conditions may be starting to impact credit beyond just "technicals". And third, we see clear catalysts for liquidity conditions to further tighten through year-end that will impact credit markets, including (but not limited to) a meaningful rise in funding rates.

Despite a notable widening in CDX spreads, cash spreads have so far been quite resilient (especially IG). However, as we have seen through prior sell-offs, cash credit investors may not sell initially, with the ability to absorb outflows at first. But persistent outflows could be self-reinforcing and likely means the weakness in credit (especially cash) takes longer to play out. At the very least, we recommend that credit investors move "up in liquidity" by shifting cash risk into the CDX indices. We discuss recent moves across the credit market and our preferred trades in more detail in this report.

Taking Stock of Recent Moves

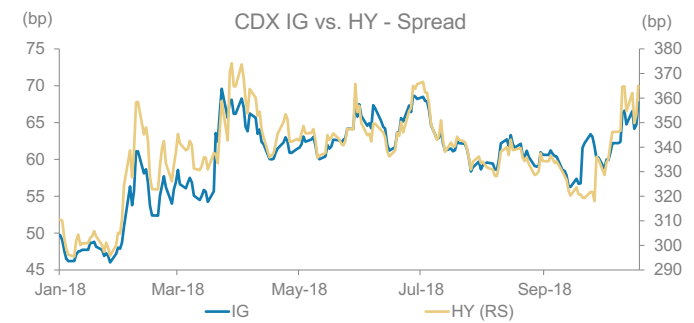
Since the recent trough in spreads on October 1, CDX IG and HY spreads have widened by 9bp and 40bp respectively (see [Exhibit 3](#)). These moves were especially meaningful given low volatility in 3Q: CDX IG traded in a 7bp range from mid-July through the end of September. Compared to a 7% sell-off in stocks and a 19pt spike in the VIX though (peak to trough), credit has held up quite well. In addition, the move in CDX spreads through the current sell-off was also a fair bit smaller than early February, especially in IG. Back then, CDX IG spreads widened by 17bp and HY widened by 63bp over a two-week span, whereas the SPX corrected by 10% (see [Exhibit 4](#)).

Exhibit 3: CDX IG has widened by 9bp and HY by 40bp through the recent volatility



Source: Morgan Stanley Research

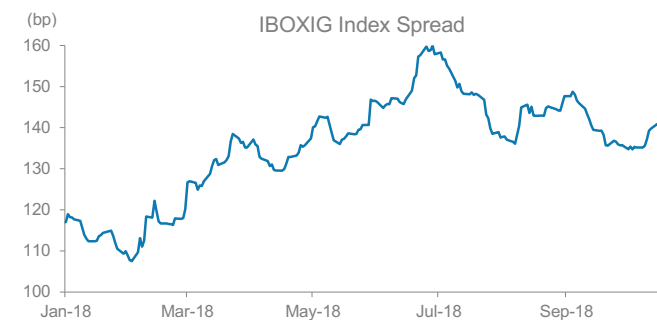
Exhibit 4: The current sell-off has been smaller in magnitude than the one in February



Source: Morgan Stanley Research

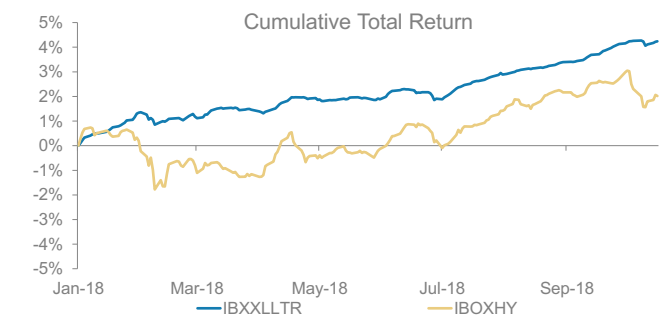
Cash credit spreads have been resilient compared to CDX. From the tights on October 1, the IG cash index is just 5bp wider and HY cash is 35bp wider. Compared to CDX, the quality curve has seen a bearish decompression in cash, with HY underperforming. In total returns, the IBOXHY cash index is down 1.2% since early October and now up just 1.8% on the year. The IBOXIG index is down 1.3% in total return in October and YTD is down 3.9%, although most of that move has been driven by the rise in Treasury yields. Loans remains the bright spot – as they have been for much of the year – with spreads unchanged through October. YTD, loans are up 4.2%, outperforming HY quite significantly (see [Exhibit 6](#)).

Exhibit 5: Similar to the early part of the February sell-off, IG cash has been more resilient



Source: Morgan Stanley Research, Markit, Bloomberg

Exhibit 6: Loans continue to outperform HY quite meaningfully



Source: Morgan Stanley Research, Markit, Bloomberg

Through the volatility, HY TRS has outperformed CDX and comparable ETFs. Dec HY TRS discount to its NAV has increased modestly from 0.46% to 0.63% MTD (see [Exhibit 7](#)). For context, the deepest discount for 3M HY TRS was close to 1.5% back in June of this year. Over the same period, the HYG ETF has underperformed its NAV, going from a premium of 35c to a discount of -15c. The Dec IG TRS premium has actually narrowed from 0.23% to 0.13%, outperforming the LQD ETF.

Exhibit 7: IBOXHY discount to NAV has been relatively stable through the volatility

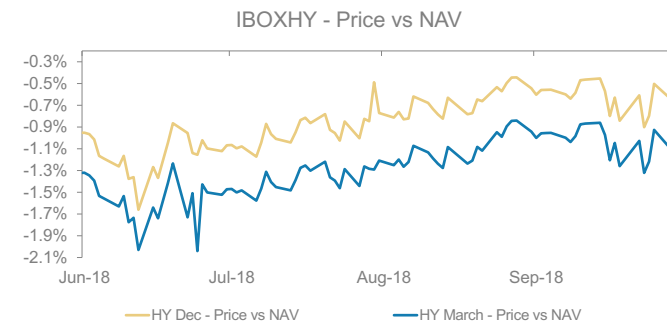
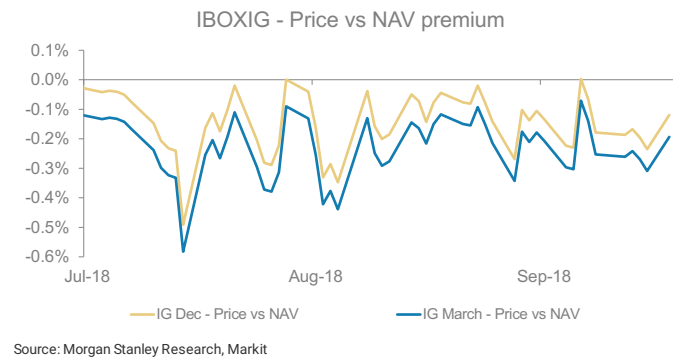


Exhibit 8: IBOXIG TRS discount to NAV also steady



In the options space, implied credit volatility has bounced from the lows in early October. 3M 50-delta vol has risen from a low of 35% in CDX IG to 47% and from a low of 24% in CDX HY to 36%. However, implied vols are well below levels that were touched through the February sell-off (see [Exhibit 9](#)). In February, 3M 50-D implied volatility in CDX IG and HY hit peak levels of 66% and 52% respectively. In addition, much of the move in 50-D vol has been driven by index spreads rolling up the vol surface. Moves in fixed strike vol have been quite small in comparison (see [Exhibit 10](#)).

Exhibit 9: From the low, 50D implied spread vol in CDX rose 12%...

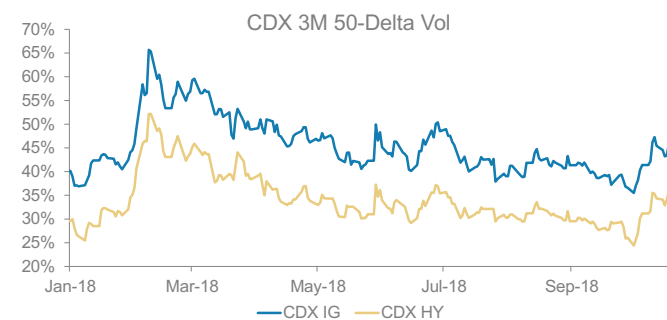
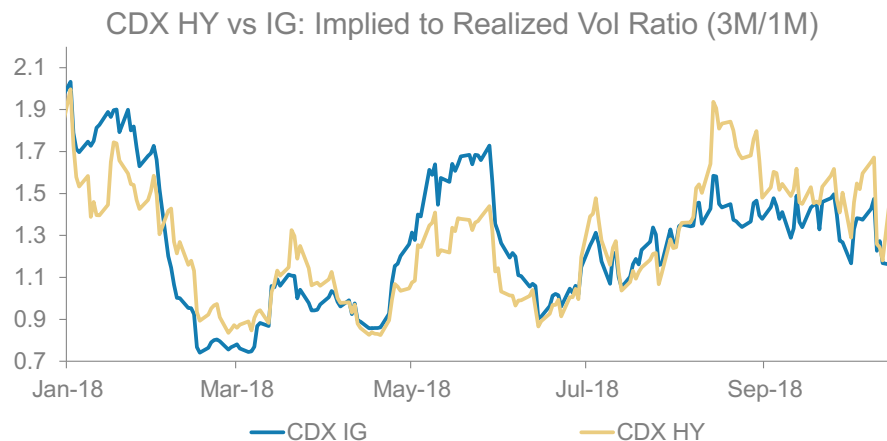


Exhibit 10:however, fixed strike volatility has not repriced by a lot

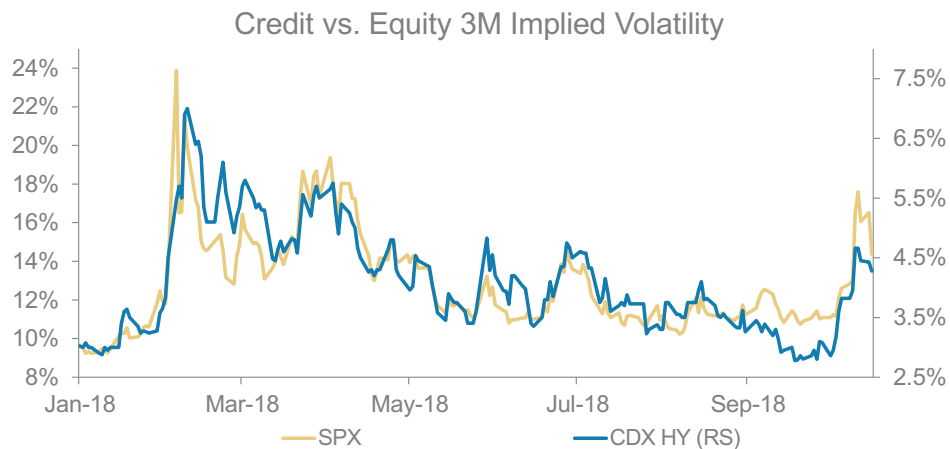


In addition, realized credit volatility has ticked higher. 1M realized volatility in CDX IG and HY is now the highest since the end of June. Accordingly, despite the repricing in implied vol, it trades at a very modest premium to 1M realized volatility.

Exhibit 11: CDX implied volatility now almost flat to 1M realized vol


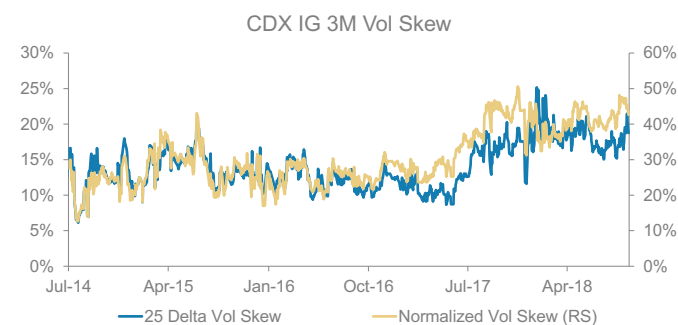
Source: Morgan Stanley Research

Similar to the story with delta-one instruments, credit vol has lagged the move in equity implied vol. For example, looking at price volatility, 3M SPX implied volatility rose from the lows of 11% to ~17%, whereas CDX HY price vol saw a more modest increase, from 3.1% to 4.7%.

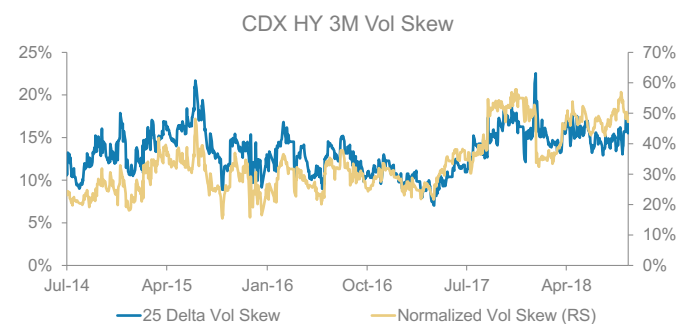
Exhibit 12: Implied credit vol lagging equity implied vol


Source: Morgan Stanley Research, Bloomberg

And finally, downside volatility has repriced higher, mostly in line with ATM volatility. The 25-D skew in absolute terms is still close to its steepest level YTD. In normalized terms (i.e., as % of 50-D vol), the skew has flattened modestly from its peak two weeks ago. However, normalized skew remains elevated vs. history, now at its 85th percentile since 2014 in IG and HY.

Exhibit 13: Volatility skew in CDX IG remains steep in absolute and normalized terms

Source: Morgan Stanley Research

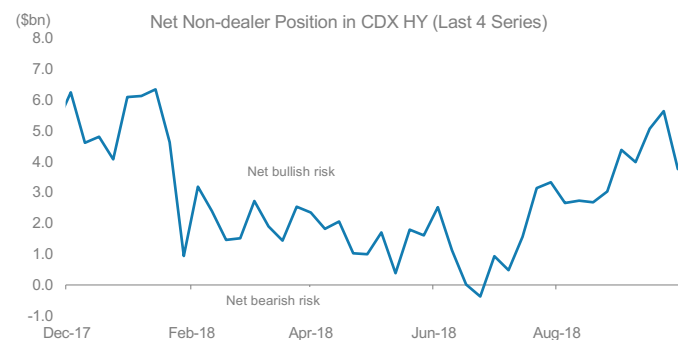
Exhibit 14: HY volatility skew elevated as well

Source: Morgan Stanley Research

Sentiment Not Bearish Yet, Signs of Fundamental Cracks

As noted upfront, one key reason we do not recommend buying the dip is that sentiment in credit has not turned incrementally bearish to any meaningful degree. In fact, our sense is that many have welcomed the relatively modest move in spreads as a buying opportunity based on our recent conversations. This quite simply is not the kind of sentiment you see at the end of correction.

Looking at positioning, we make the same observation. Below, we show DTCC data on non-dealer positioning in the CDX IG and HY indices (last four series). As the charts highlight (see [Exhibit 15](#) and [Exhibit 16](#)), non-dealers have cut their long exposure to CDX IG and HY over the past two weeks. However, they are still long a significant amount of risk relative to the past six months. It is worth noting that as recently as early July, non-dealer positioning was net bearish in CDX HY. Similarly in IG, non-dealer positioning was net short risk in the on-the-run index briefly in March (this was the first such instance since 2012). And while these data-points are not perfect proxies for sentiment, they reinforce a point we made earlier, i.e., while sentiment got reasonably bearish through the summer, it rebounded sharply in 3Q and hasn't come close to reversing that over the past two weeks.

Exhibit 15: Non-dealer positioning in CDX HY still quite long risk, unlike July when it was net bearish

Source: DTCC, Morgan Stanley Research

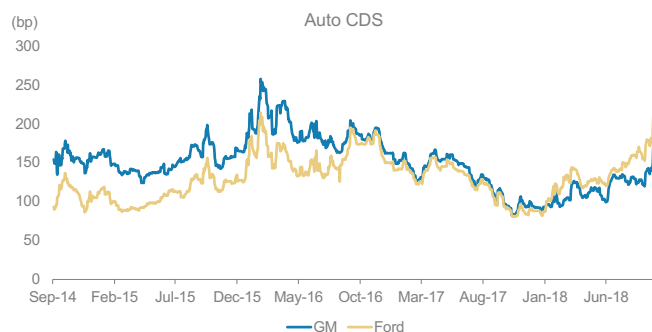
Exhibit 16: Non-dealer longs in CDX IG are lower in recent weeks, but well above levels seen through the weakness in the first half

Source: DTCC, Morgan Stanley Research

In addition to sentiment, we also note that there is more evidence of fundamental credit weakness today than was the case through the January/February sell-off. Back in early February, market volatility weighed disproportionately on low-beta credit. Not only did HY outperform IG, but within HY, the high-beta CCC part of the market outperformed as the economy was resilient and earnings growth was very strong. In contrast, the current bout of weakness has seen HY and IG perform roughly in line in CDX and HY underperforming in cash. Within HY cash as well, high-beta has modestly underperformed, with CCCs down 0.9% in October vs. Bs down just 0.6%.

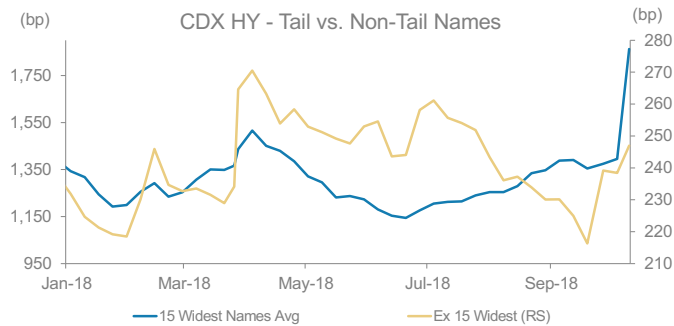
In addition, as we noted recently, sector and name-specific issues in credit are coming up on a more regular basis, a trend that began well before the current sell-off (see [Owning Decompression and Volatility](#)). To cite a few examples, the "tail" in the CDX HY index has now weakened quite substantially (including a recent default). In fact, looking at valuations for the tail vs. the rest, we find that the move in CDX HY has disproportionately been driven by the very widest names. In IG, the large auto names in the CDX index are already trading at "HY-like" valuations and multi-year wides (see [Exhibit 17](#)). While some of the YTD widening might be related to tariffs (i.e., very sector-specific), the sharp move wider over the past two weeks may suggest growing concerns about the global economy.

Exhibit 17: CDS spreads for the IG auto names close to multi-year wides



Source: Morgan Stanley Research

Exhibit 18: Unlike the February sell-off, the tail is much weaker in CDX HY today



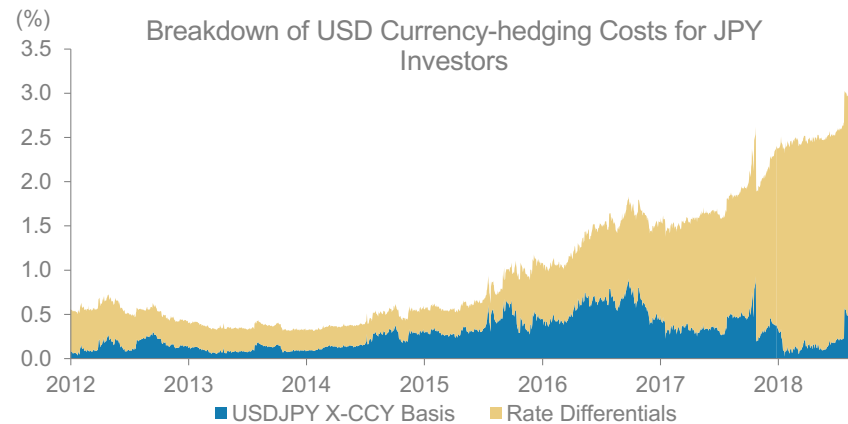
Source: Morgan Stanley Research

In our view, this weakness in certain pockets of the market isn't merely "idiosyncratic". It is evidence that the tightening in liquidity conditions and broader headwinds (tariffs, etc.) are starting to expose some of the fundamental challenges in credit, especially with EPS growth and margins at peak levels. Along these lines, our equity strategy colleagues recently published a report outlining growing margin pressures for US companies on the back of rising costs in wages, energy, freight, materials, and funding/rates, among others (see [US Equity Strategy: No Margin for Error](#)). In short, while the sell-off in February was predominantly "liquidity stress," we think there is incrementally more evidence of credit stress today. And, as liquidity conditions tighten further, earnings growth slows and margin pressures rise, these weak spots should keep popping up on a more regular basis. At the very least, we think this argues in favor of still-cautious positioning with these risks not in the price.

Finally, it's worth keeping in mind what drove this sell-off in the first place, i.e., a sharper pace of tightening in liquidity conditions. It started with a sharp spike in US interest rates, which happened at the same time as the ECB tapered its asset purchases in early October and the Fed ramped up the unwind of its balance sheet to \$50 billion per

month. More importantly, we think these broader dynamics will only become more challenging for credit over the next few months. Specifically for IG cash credit (see [Foreign Flows: Rough Around the Hedges](#)), we think rising funding rates will drive up currency-hedging costs and create a headwind for non-US demand (similar to 1Q of this year).

Exhibit 19: Rising funding rate differentials should continue to weigh on cash credit

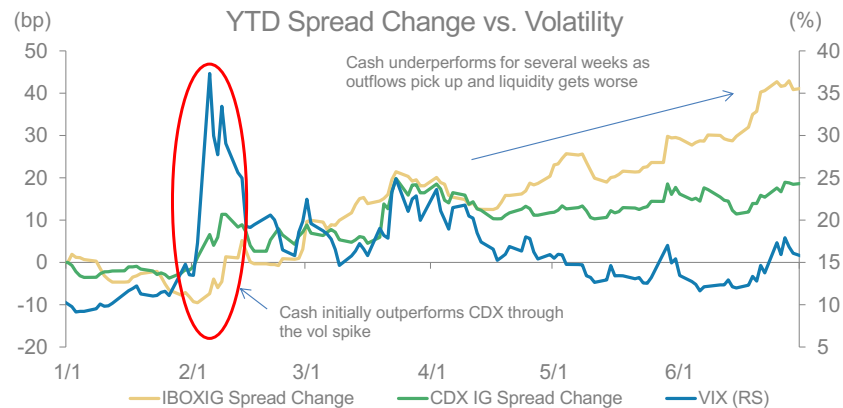


Trade Ideas

1) Long Synthetic Credit vs. Cash/TRS

For investors looking to add risk in the very short term, we think the CDX indices offer better value than cash. Yes, cash credit, especially in IG, has been more resilient so far. But in our view, the set-up is quite similar to what we saw in early February (and several other sell-offs in this cycle). In short, rates rose sharply in early January, driving higher volatility in risk assets. Negative returns drove outflows that cash investors were initially able to absorb because of liquidity buffers. In contrast, CDX IG was initially the most liquid and scalable instrument to use as a hedge (as opposed to actually selling bonds). As the below chart shows, cash credit was initially resilient through the sell-off in early February. While the VIX spiked from 11 to 37 and CDX IG widened by 17bp in two weeks, IG cash widened by just 6bp over the same period. However, as higher interest rates and rising funding rates pressured fund flows, the IG cash market saw spreads widen for several weeks, underperforming CDX IG.

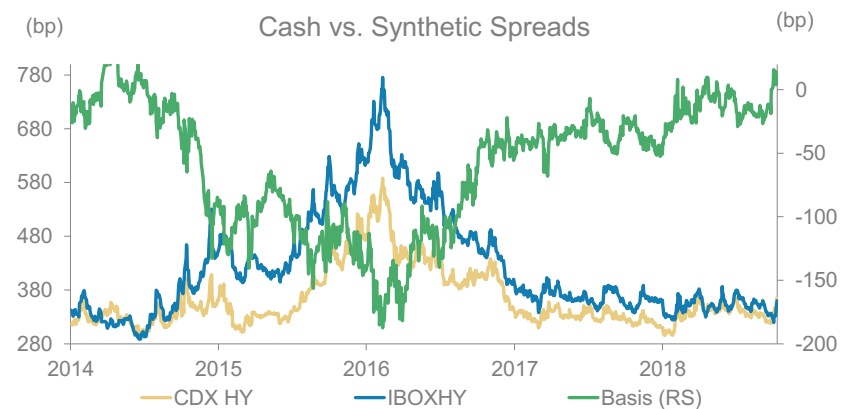
Exhibit 20: Cash credit was initially resilient through the Feb sell-off as volatility spiked, but weakened meaningfully for several weeks as technicals got worse



Source: Morgan Stanley Research, Markit

Our preferred trade to position for cash underperformance is by shorting HY TRS to December vs. going long CDX HY31. As [Exhibit 21](#) shows, the cash index spread is roughly in line with CDX HY, suggesting that investors are not being appropriately compensated for the weaker liquidity of cash bonds vs. index. And more importantly, as the Exhibit shows, in a prolonged spread-widening environment, cash tends to underperform synthetic credit quite meaningfully. For example, at the wides in spreads in 2016, IBOXHY spreads were ~800bp, whereas CDX HY spreads peaked at ~580bp. Quite simply, we think this trade works as a cheap option in such an environment, i.e., limited carry cost if markets are sideways, but substantial upside in a credit bear market. The key risk to this trade is cash technicals stabilize and bond spreads outperform CDX HY.

Exhibit 21: CDX HY spreads roughly in line with IBOXHY, suggesting that investors are not compensated for the weaker liquidity of cash bond vs. synthetics



Source: Morgan Stanley Research, Markit

Most of the themes we discuss above for HY apply to the IG market as well. However, in IG, we are less willing to implement the cash vs. synthetic view using the CDX vs. TRS because of the duration mismatch and our view on the credit curve (the IBOXIG index is longer in duration compared to CDX IG). In IG cash, we think the front end is more vulnerable going forward especially as currency-hedging costs rise and "cash" becomes a more attractive alternative. Accordingly, we like positioning for a more negative basis in IG by replacing short-dated cash bonds with 5Y CDS (see [Exhibit 22](#)).

Exhibit 22: IG basis screen - short-dated bonds vs. 5Y CDS

Ticker	Rating	Maturity	Coupon	Bond Spread	Interp. CDS	Interp. Basis	5Y CDS
WHR	Baa1 / BBB	Mar-24	4.000	95	144	49	133
PRU	Baa1 / A	May-24	3.500	42	76	34	67
TGT	A2 / A	Jul-24	3.500	20	46	26	37
MET	A3 / A-	Sep-23	4.368	45	67	22	69
LNC	Baa1 / A-	Sep-23	4.000	63	84	21	87
CAT	A3 / A	Nov-23	3.750	24	44	20	43
NRUC	A1 / A	Nov-23	3.400	33	53	20	52
KR	Baa1 / BBB	Aug-23	3.850	69	85	15	90
IP	Baa2 / BBB	Jun-24	3.650	83	98	14	86
PG	Aa3 / AA-	Aug-23	3.100	15	28	13	29
BA	A2 / A	Jun-23	1.875	20	33	13	36
SPG	A2 / A	Feb-24	3.750	62	74	12	68

Source: Morgan Stanley Research. Note: Interpolated CDS is calculated to bond maturity

2) Long Loan TRS vs. HY TRS

Despite our generally cautious stance on credit, one asset class that we believe should continue to be more resilient in the near term is leveraged loans. While loans have outperformed HY quite meaningfully, most of that has been driven by the floating-rate exposure of the former (which has benefitted from higher LIBOR) vs. the fixed-rate exposure of HY. In spread terms, loan valuations still look reasonable to HY (see [Exhibit 23](#)) and if volatility remains elevated, we think loans should outperform as the lower-beta asset. We would add the caveat that we see enough reasons to be cautious on fundamentals in the loan market. Especially over the past two years, strong demand for floating-rate products has pushed flows into loans, which in turn has translated into weaker credit quality and more levered transactions (see [Bigger but Not Better](#)). However, with LIBOR starting to rise again and higher rates potentially acting as a headwind for fixed-rate credit, loan flows should hold up better in this part of the Fed rate-hiking cycle. In comparison, the HY market in our view remains vulnerable to another leg higher in rates. As noted earlier, so far, investors may have been able to absorb the outflows because of liquidity buffers. But rising rates/negative returns could have a more meaningful impact going forward as the liquidity buffer shrinks. We like positioning for this view by buying Dec Loan TRS vs. selling Dec HY TRS. The key risk to this trade is that interest rates fall meaningfully in the near term, which challenges the supportive technicals for leveraged loans and benefits HY flows.

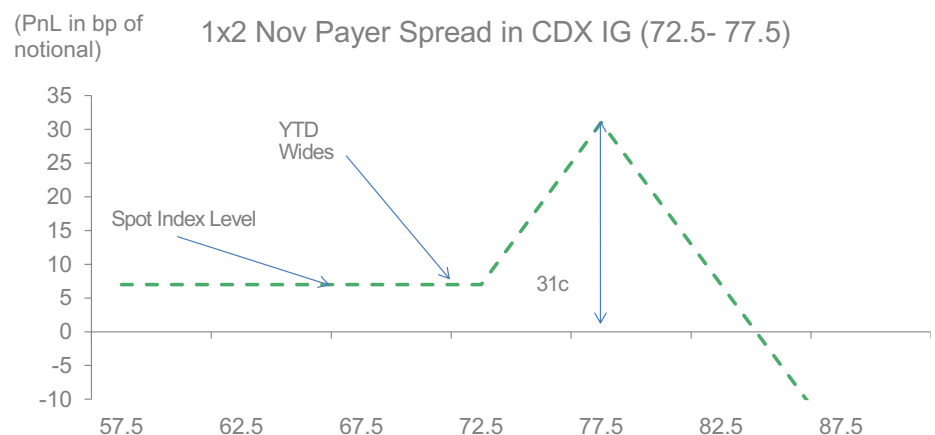
Exhibit 23: Despite YTD outperformance, loan spreads look reasonable relative to HY


Source: Morgan Stanley Research, FTSE Russell, S&P LCD

3) 1x2 payer spreads in CDX IG, 1x1 payer spreads in CDX HY

In options, we think payer spreads in CDX IG and HY look quite attractive, given how elevated the volatility skew is. And, if the next leg wider in credit is driven by weaker cash technicals, we think CDX will trade in a bearish range, further supporting payer spreads.

In CDX IG, we recommend 1x2 payer spreads through November (72.5/77.5). Given the steep skew, this trade pays investors an upfront amount of 7c. As the below [Exhibit 24](#) shows, at expiry, the trade breaks even as long as CDX IG is tighter than 85bp. The max upside on this trade is 31c if CDX IG is at 77.5bp at expiry. The key risk to this trade is that CDX IG widens sharply over the next month.

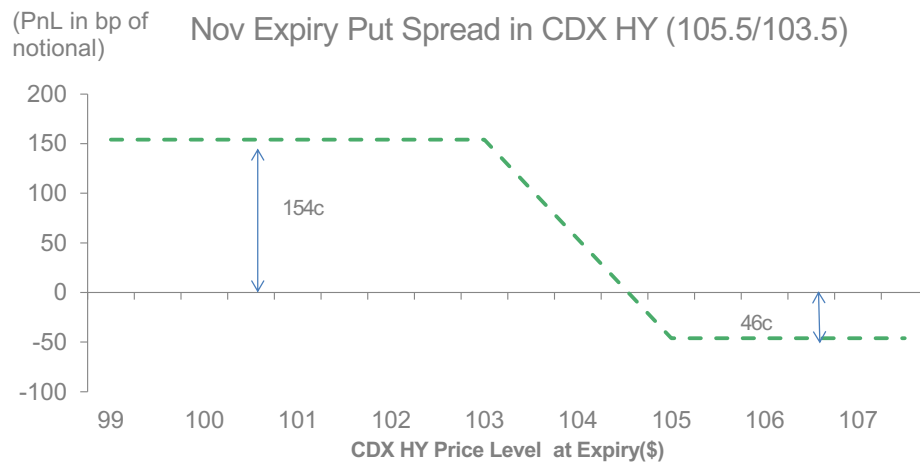
Exhibit 24: 1x2 payer spreads in CDX IG to position for a bearish range


Source: Morgan Stanley Research

In CDX HY, we recommend 1x1 payer spreads through November (105.5/103.5). This trade costs 46c upfront, with a max profit of 154c if CDX falls by another \$2.5 over the next month. We recently recommended put spreads in our [Credit Derivatives Tracker](#) on October 1 as well. At the time, the max leverage on these trades was a very attractive ~5x. With the widening in spreads and repricing higher in vol, the leverage is not as

attractive today. Nonetheless, we think put spreads are still a cheap way to position for a further modest widening in spreads. The key risk to this trade is that CDX HY rallies through November.

Exhibit 25: Put spreads in CDX HY



Source: Morgan Stanley Research

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(as of September 30, 2018)

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STOCK RATING CATEGORY	COVERAGE UNIVERSE		INVESTMENT BANKING CLIENTS (IBC)			OTHER MATERIAL INVESTMENT SERVICES CLIENTS (MISC)	
	COUNT	% OF TOTAL	COUNT	% OF TOTAL IBC	% OF RATING CATEGORY	COUNT	% OF TOTAL OTHER MISC
Overweight/Buy	1178	37%	308	42%	26%	562	40%
Equal-weight/Hold	1378	44%	343	46%	25%	625	44%
Not-Rated/Hold	49	2%	5	1%	10%	7	0%
Underweight/Sell	554	18%	83	11%	15%	224	16%
TOTAL	3,159		739			1418	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

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Overweight (O). The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

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