

## Focus

# Decompression in the New Year

Decompression between CDX.HY and IG has led to questions about whether we are due for a reversal. With CDX.HY performance increasingly reliant on the widest credits, which tend to be more idiosyncratic, we think investors should instead position for decompression between CDX.IG and a subset of CDX.HY – the CDX.HY.BB index.

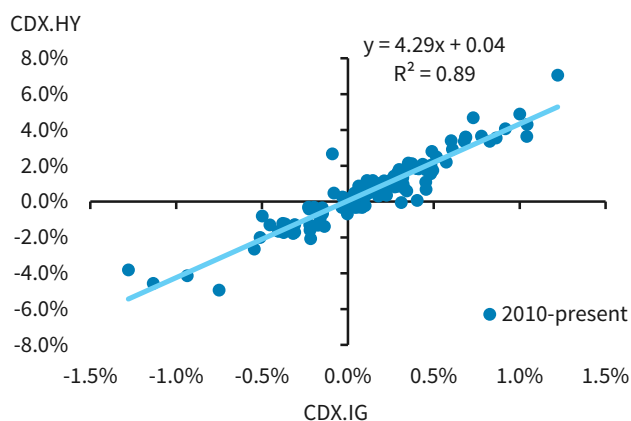
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## A Robust, but Unequal, Rally for the CDX Indices

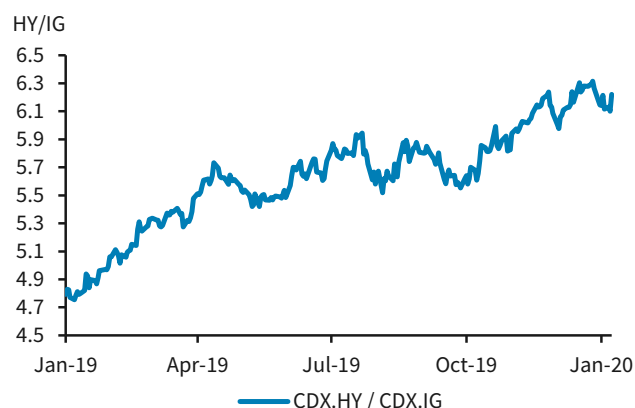
The CDX indices closed out 2019 in much the same way that they started the year – with another rally. CDX.IG tightened 15bp in the fourth quarter and recorded full-year unfunded total returns of 3.33%, which is the best annual return for the index since 2009. CDX.HY tightened 58bp (adjusted for the Dean Foods default) in the fourth quarter and returned 10.66% for the full year, the best annual return since 2016. The rally took both indices to the tightest levels since 2007. But while both indices rallied, their relative performance stands out in a historical context. The 2019 CDX.HY/CDX.IG return ratio of 3.2 is well below the historical HY/IG return beta of 4.3 (based on monthly returns since 2010; see Figure 1). The difference in performance can also be seen in the HY/IG spread ratio, which has increased meaningfully since the beginning of 2019 (Figure 2).

**FIGURE 1. The Historical CDX HY/IG Return Beta Is 4.3, Well above the 3.2 Beta in 2019**



Note: Chart depicts monthly returns since 2010.  
Source: Bloomberg, Barclays Research

**FIGURE 2. The CDX.HY / CDX.IG Spread Ratio Has Increased Meaningfully since the Start of 2019**



Source: Barclays Research

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## CDX.HY Performance Has Become Increasingly Dependent on the Widest Trading Credits, Which Tend to Be More Idiosyncratic in Nature

The lagging performance of CDX.HY has led to questions about whether the relative underperformance of the index can continue, or whether it could be poised to compress versus CDX.IG. One way to assess the outlook for each index is by taking a step back and understanding what drove the performance of each index in 2019 from a bottom-up perspective.

We start by dividing the constituents of each index into quintiles based on their spread levels at the start of 2019 and then measuring the average spread change for each quintile (Figures 3 and 4). For CDX.HY, we use points upfront instead of spread. For CDX.IG, all five quintiles tightened by a similar percentage, which indicates that performance was fairly uniform on a beta-adjusted basis. In addition, absolute performance improved moving from the first to the fifth quintile, which is what we typically expect in a sizable rally.

In contrast, the rally among HY constituents was much less uniform than it was for IG constituents, with the three tightest quintiles leading the rally. In fact, for the first 11 months of the year, the widest quintile was actually 2pts wider, and it was not until December that it started to rally. We think one factor that contributed to this disparate performance is the reverse arb (see [A Bottom-up Look at CDX.HY](#) for more details), whereby investors looked to buy protection on the index and sell protection on the underlying single names in order to capture the skew, or the difference between the traded index and its intrinsic value. We think that the reverse arb had a negligible effect on the widest trading credits, which trade more on fundamentals and less on technicals, and an outsized effect on the tightest trading credits, whose fundamentals tend to be less of a concern and are therefore more susceptible to technical pressure.

**FIGURE 3. The CDX.IG Constituent Rally Was Broad Based...**

Average Spread (bp)				
Quintile	12/31/2018	12/31/2019	Chg	Pct Chg
1: Tightest	36	21	-15	-41%
2: Tight	60	30	-30	-50%
3: Average	85	41	-44	-52%
4: Wide	115	62	-53	-46%
5: Widest	178	91	-87	-49%
	<b>95</b>	<b>49</b>	<b>-46</b>	<b>-48%</b>

Source: Barclays Research

**FIGURE 4. ...While the Widest CDX.HY Constituents Lagged Meaningfully**

Average 5y CDS (Pts UF)			
Quintile	12/31/2018	12/31/2019	Change
1: Tightest	-15	-21	-6
2: Tight	-12	-18	-7
3: Average	-7	-17	-10
4: Wide	1	-2	-3
5: Widest	22	20	-3
	<b>-2</b>	<b>-8</b>	<b>-6</b>

Source: Barclays Research

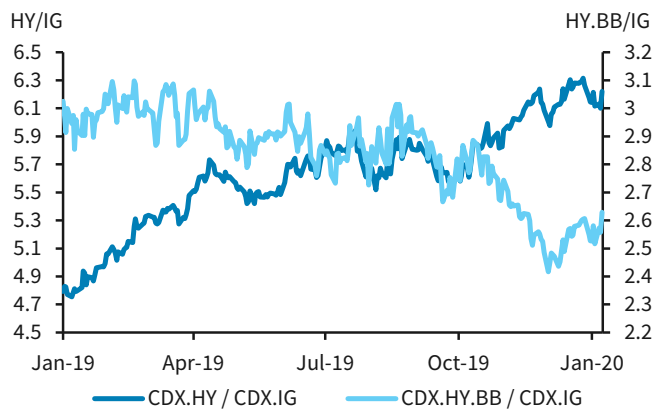
Currently, more than 70% of CDX.HY constituents trade inside of 300bp, and as a result, we think further upside for the index will be increasingly dependent on a rally of the widest trading credits. While we had been skeptical about the ability of the widest credits to drive the index tighter (because of the lagging performance of higher-beta parts of the market for most of 2019), that is exactly what occurred in December, as the fourth and fifth quintiles were 2pts and 5pts tighter, respectively, while the other three quintiles of CDX.HY were unchanged. Due to the performance of the widest trading credits, CDX.HY actually managed to outperform its historical beta to CDX.IG in December, although it continued to lag on a full-year basis. As a result, we believe that taking a view on the future path of the CDX.HY/CDX.IG relationship is really taking a view on the performance of the widest trading credits in CDX.HY, whose performance tends to be more idiosyncratic in nature.

## Position for Decompression Using CDX.HY.BB

While the underperformance of the widest trading credits in CDX.HY helped drive decompression between CDX.HY and CDX.IG in 2019, the outperformance of the tighter-trading credits actually led to compression between CDX.IG and a subset of CDX.HY – the CDX.HY.BB index (Figure 5). This is similar to the BB/BBB compression that occurred in the cash market (see [Building a Better BB/BB Basis](#) for more details).

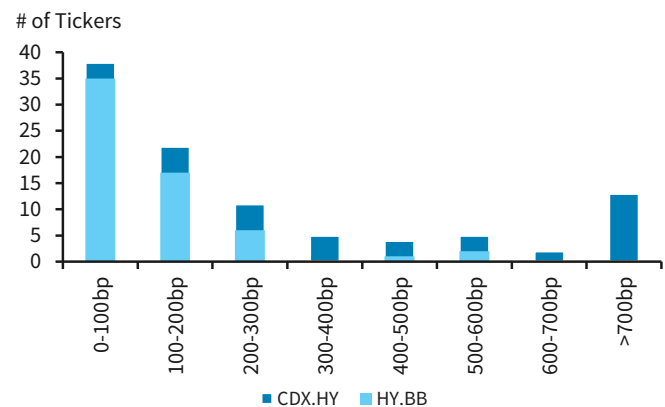
CDX.HY.BB consists of the credits in CDX.HY that were rated BB at the time of the roll. The current iteration of the index – HY33.BB – consists of 61 credits, all but two (Pitney Bowes and Nabors) of which are currently in the first three quintiles of the index. Figure 6 overlays the constituent spread distribution of CDX.HY with that of HY.BB. Nearly 60% of HY.BB constituents trade inside of 100bp, and 85% trade inside of 200bp. We think that the BB credits in the index have been more susceptible to the technical pressure from the reverse arb that we discussed earlier, and as a result, HY.BB is now trading at historically tight levels, both in absolute terms and relative to CDX.IG (Figure 7).

**FIGURE 5. While the HY/IG Ratio Has Decompressed, the HY.BB/IG Ratio Has Actually Compressed**



Source: Bloomberg, Barclays Research

**FIGURE 6. The Constituents of HY.BB Are Concentrated in the Tightest Spread Buckets**



Source: Barclays Research

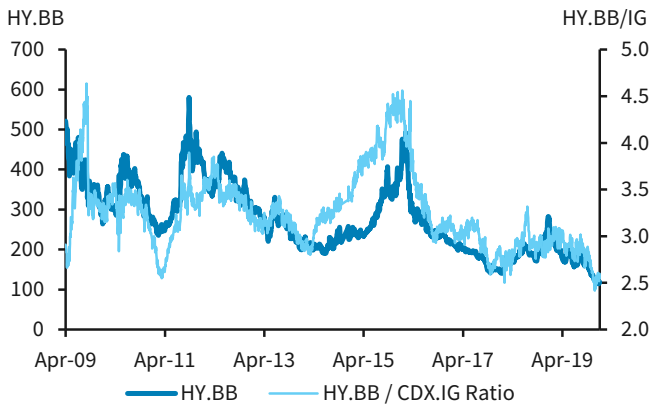
Looking ahead, we think HY.BB could decompress versus CDX.IG in one of two ways. First, the historically tight level of the index could limit its upside, while CDX.IG, which tends to trade more with risk sentiment and market volatility, could continue to rally if risk sentiment remains positive. This is exactly what has occurred since the end of November, as the HY.BB / CDX.IG ratio has decompressed over that time frame (Figure 5). The other potential path to decompression is if HY.BB underperforms in a sell-off, which we think is possible, especially if the CDX.HY skew tightens and leads to unwinding of reverse arb packages. In terms of sizing a decompression trade, we recommend using a 3-to-1 ratio of CDX.IG to HY.BB based on the one-year carry and rolldown profile of the intrinsic curve of each index.

For investors who are less interested in IG-HY relative value, we also think HY.BB could be an attractive outright hedge, especially for those looking for protection but who are concerned about the potential for a high-beta rally.

We recognize that one potential concern with regard to HY.BB is liquidity. However, recent volume trends have been encouraging (Figure 8), and we have heard that several dealers are currently making markets on the index. In addition, any further reverse arb activity should serve as a natural source of liquidity for those looking to buy protection on the index.

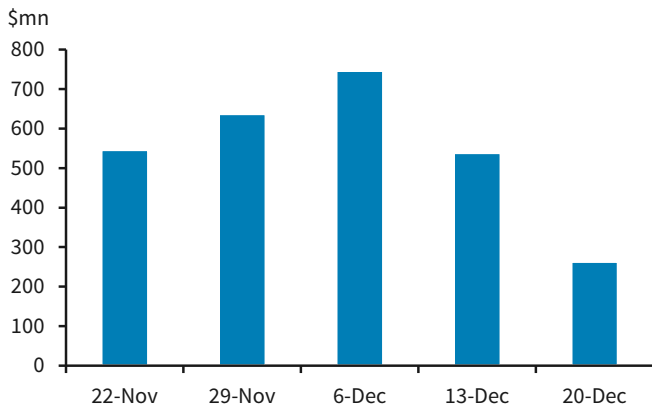
We also think that hedging with the HY.BB index is currently more attractive than hedging with BB bonds, as HY.BB trades meaningfully tighter (110bp, versus an OAS of 180bp for the BB component of the Bloomberg Barclays High Yield Index) and provides exposure to 61 BB credits in one line item.

**FIGURE 7. HY.BB Intrinsic Spread Is at or Close to the Tights, Both in Absolute Terms and versus CDX.IG**



Source: Bloomberg, Barclays Research

**FIGURE 8. Weekly HY.BB Volumes Have Been Encouraging**



Source: DTCC, Barclays Research

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