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A Bottom-up Look at CDX.HY

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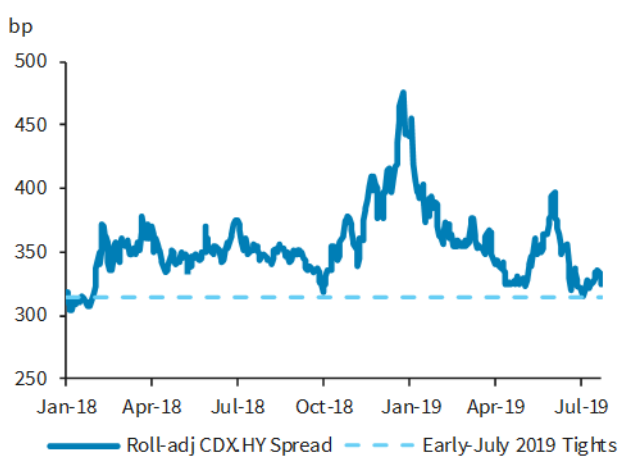
After rallying sharply from the end of May to early July, CDX.HY drifted wider over the following two weeks before resuming its rally this week. With this week's move, CDX.HY spreads are back within 5bp of the early-July tights, which were the tightest levels for the index since January 2018 (Figure 1). As the index rallied from late May to early July, it started to trade at a richer premium to intrinsic (ie, the tightening in the index outpaced the rally in its underlying constituents, Figure 2). This dynamic increased interest in reverse arbitrage trades, whereby investors bought protection on the index and sold protection on the underlying single names to capture the skew, or the index-intrinsic premium (for more details on reverse arbitrage, see *Dissecting the IG Index Arb*, January 29, 2016).

One implication of the reverse arbitrage trade is that it has contributed to the outperformance of the tighter-trading names in the index. We can illustrate this by bucketing the 99 current constituents of CDX.HY into quintiles based on their spread levels as of May 31 (we exclude Weatherford CDS from our analysis because it has dropped out of the index due to the recent credit event), calculating the average spread change for each one from May 31 to July 23, and then comparing their spread changes to that of CDX.HY. For ease of reference, we identify the quintiles as Tightest, Tight, Average, Wide, and Widest. As Figure 3 shows, the Tightest, Tight, and Average buckets have outperformed CDX.HY and the Wide and Widest buckets in percentage terms, while the Average bucket has also outperformed in absolute terms despite trading 135bp inside of the index spread on May 31. We would place less emphasis on the average spread performance of the Widest bucket, as the credits in this quintile have a very wide range of spreads (therefore, some widening in the very wide names is masking some strong performance from others). But the overall point is that the credits that were already trading tighter than the index on May 31 have, on average, outperformed.

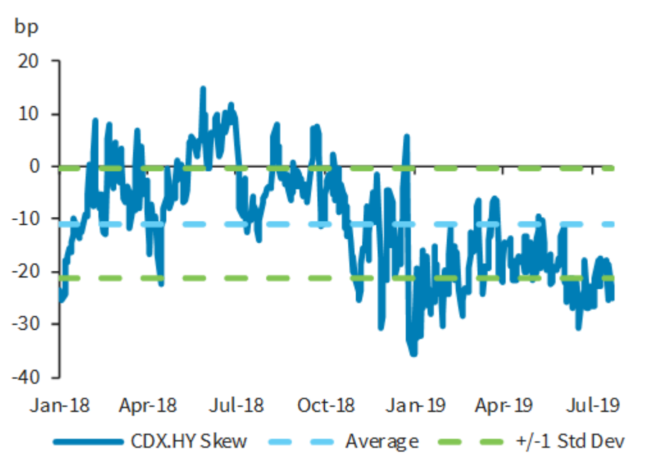
As a result of this outperformance, the underlying constituent spread distribution of CDX.HY has shifted even further to the left (Figure 4). Twenty-four constituents now trade inside of 100bp (versus eight on May 31), 55 constituents trade inside of 200bp, and two-thirds of index constituents trade inside of the index spread. At the other end of the

FIGURE 1
CDX.HY Remains Close to Recent Tights



Note: The time series does not reflect the removal of Weatherford, whose CDS auction was held on July 24. Source: Barclays Research

FIGURE 2
The Richness of the CDX.HY Skew (Index-Intrinsic Basis) Has Driven Recent Reverse Arbitrage Activity



Source: Barclays Research

FIGURE 3

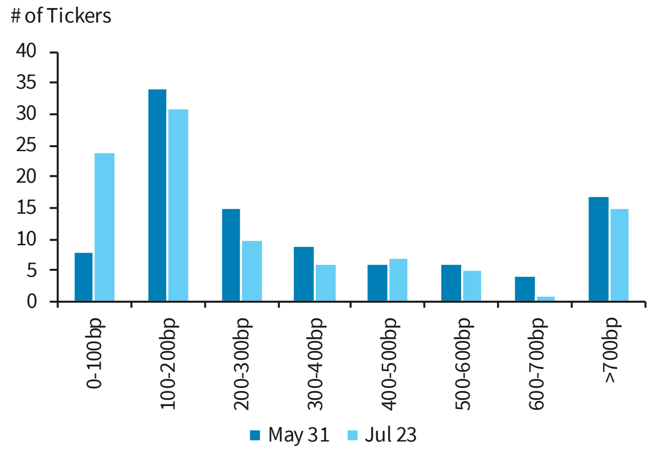
The Tightest Three Quintiles Have Outpaced Index Performance on a Percentage Basis

	Average Spread (bp)			
Quintile	**5/31/2019**	**7/23/2019**	**Chg**	**Pct Chg**
1: Tightest	103	66	-36	-35%
2: Tight	162	120	-42	-26%
3: Average	257	179	-78	-30%
4: Wide	484	425	-59	-12%
5: Widest	1492	1538	46	3%
CDX.HY	392	324	-68	-17%

Source: Barclays Research

FIGURE 4

The Recent Rally Has Meaningfully Increased the Number of CDX.HY Constituents Trading inside of 100bp



Source: Barclays Research

distribution, 15 credits currently trade wider than 700bp, which is only two fewer than on May 31. This has resulted in the index's having a very high concentration of very tight-trading credits, a still-high number of wide-trading credits, and fewer credits in the mid-spread buckets (only 19 credits at 300-700bp).

We think there are two main takeaways from this analysis.

The Upside/Downside of CDX.HY Appears Increasingly Unattractive

The skewed constituent distribution of the index makes it increasingly dependent on the widest-trading constituents to rally. The ten widest credits in CDX.HY trade at an average of 40pts upfront, which on the surface could indicate some potential upside. But with those credits trading at stressed/distressed levels for a reason (typically credit-specific issues), and given their lagging performance in the recent rally, we think this is less likely.

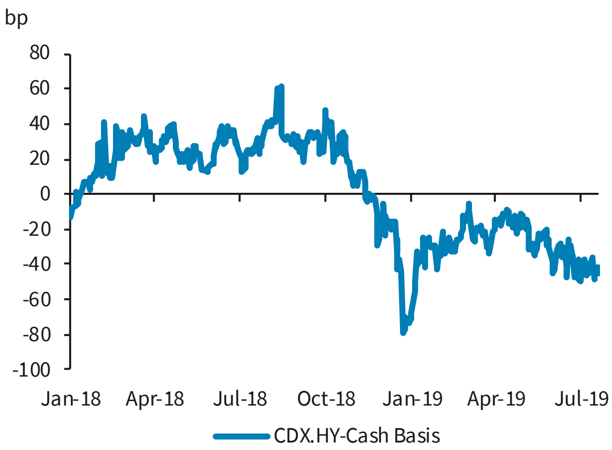
Two other factors contributing to our negative view on the index are overall valuations and the CDS-cash basis. With regard to valuations, as of July 23 (pre-Weatherford removal), the index is trading approximately 20bp away from the roll-adjusted post-crisis tight of 304bp that was reached in June 2014. And with regard to the CDX.HY-cash basis (Figure 5), using index-level spreads, we find that the basis remains at the wider end of the range since January 2018 (currently at the fourth percentile).

Taken together, we think investors can position for CDX.HY underperformance by buying protection on the index outright or by using the options market. Within options, we generally prefer trades such as buying 1x1 put spreads to hedge against a moderate widening.

Investors who want to hedge but are concerned about the wider-trading index constituents rallying could consider a strategy of buying protection on the index and simultaneously selling protection on some of the widest-trading constituents. We think that current levels for such a strategy compare favorably to history. For example, the 90 tightest-trading credits in the index trade at an aggregate spread of 229bp (Figure 6). A strategy that buys protection on these 90 credits by using the index (ie, buys protection on the index and sells protection on the nine widest index constituents) would effectively be getting long protection on these credits at 204bp after factoring in the index skew (but before transaction costs). This is actually tighter than the comparable level for the same strategy when the index reached its post-crisis tight in June 2014.

FIGURE 5

CDX-Cash Basis Remains at the Wider End of the Range since 2018



Note: Chart compares the roll-adjusted CDX.HY spread to the L-OAS of the Bloomberg Barclays High Yield Index. Source: Bloomberg Barclays Indices, Barclays Research

FIGURE 6

The Tightest 90% of CDX.HY Constituents Are Collectively Trading at Historically Tight Levels

Index Spread Calculation	Index Spread
HY32 Intrinsic on July 24, 2019 (ex-WFT)	333bp
Ex-9 Widest Credits (JCP, NMG, FTR, DF, CYH, HOV, CRC, RAD, MNI)	229bp
+ Index Skew (-25bp)	204bp
HY22 Intrinsic on June 20, 2014 (ex-TXU)	281bp
Ex-9 Widest Credits (RSH, CZR, FST, TOY, SRAC, IHRT, MBIA, JCP, JNY)	207bp
+ Index Skew (+12bp)	219bp

Source: Barclays Research

Take Advantage of the Reverse Arb Technical and Screen for Tight-Trading Index Constituents

For investors who prefer to look for single-name opportunities as opposed to index hedges, we present a screen of index constituents that meet the following criteria:

- Trade tighter than CDX.HY
- Trade at the tighter end of their LTM range (<10th percentile)
- Have exhibited a higher beta to CDX.HY (using daily spread changes over the past year) than their current spread ratios to CDX.HY

We use the last constraint to look for credits that have historically moved more relative to CDX.HY than their current ratios versus CDX.HY would imply. We recognize that some of these relationships have likely changed over time, but we think this is a reasonable starting point to screen for tight-trading index names.

The results of the screen are shown in Figure 7. For each constituent, we also provide the average weekly trading volume over the past three months. We do not use volume as part of the criteria since future reverse arbitrage activity could be a source of liquidity for even the less-liquid index constituents.

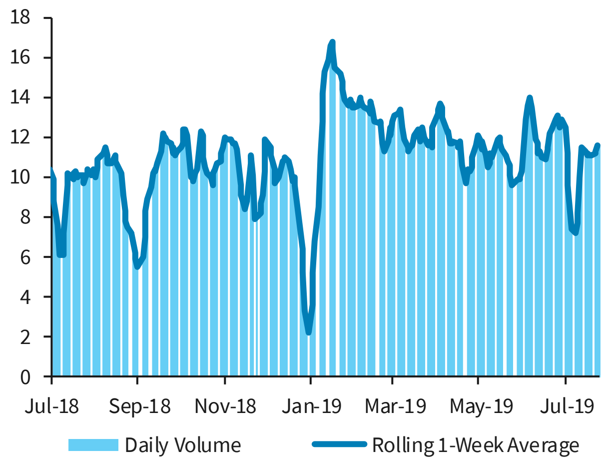
FIGURE 7

Screen Results: Tight-Trading CDX.HY Constituents with a Higher Historical Beta to CDX.HY Than the Current Spread Ratio to CDX.HY Would Imply

	5y CDS (bp)					
Ticker	**Current**	**1y Range**	**1y Pctl Rank**	**Ratio to CDX.HY**	**1y Beta to CDX.HY**	**3m Avg Weekly Volume ($mn)**
TSG	45	43-216	3%	0.14	0.21	4
AMD	64	64-211	0%	0.20	0.38	18
CIT	71	68-243	0%	0.22	0.34	13
MDC	75	75-228	0%	0.23	0.40	28
MTG	76	76-268	0%	0.23	0.34	15
TOL	85	85-228	0%	0.26	0.41	25
PHM	93	93-217	0%	0.29	0.44	44
ALLY	96	96-218	0%	0.30	0.35	19
BYD	96	91-255	6%	0.30	0.32	12
RDN	98	98-283	0%	0.30	0.38	29
LEN	98	92-221	3%	0.30	0.41	52
MTOR	134	129-331	3%	0.41	0.45	23
STAR	138	138-440	0%	0.43	0.44	10
AMGFIN	160	152-447	4%	0.49	0.64	14
KBH	165	165-382	0%	0.51	0.63	43
CAR	211	211-499	0%	0.65	0.74	46

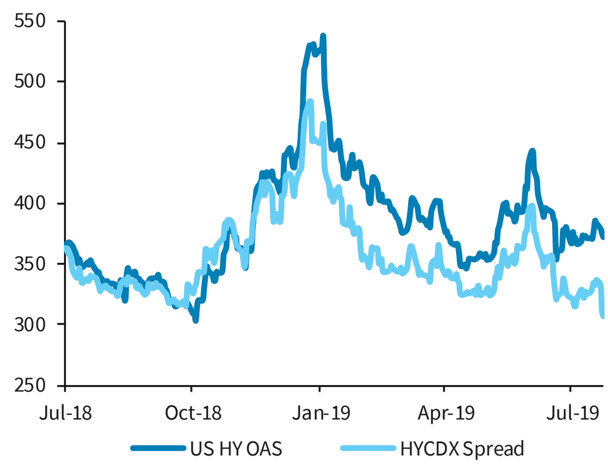
Note: Levels as of July 23. Beta calculated using daily spread changes over the past year.
Source: DTCC, Barclays Research

High Yield Average Institutional Trade Volume ($bn)



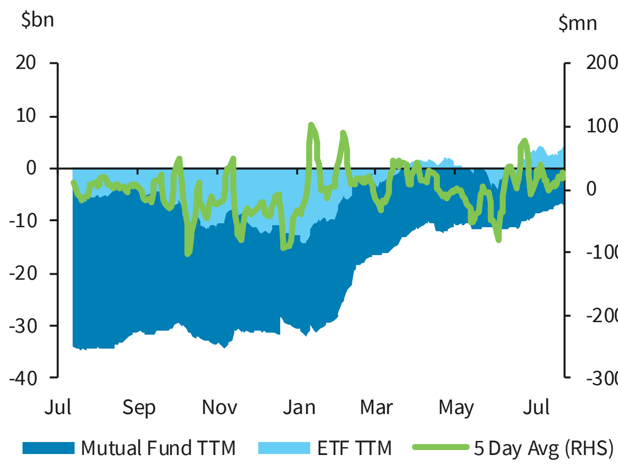
Note: Includes both registered and 144A volumes. Source: FINRA TRACE

On-the-Run HYCDX versus US High Yield Index (bp)



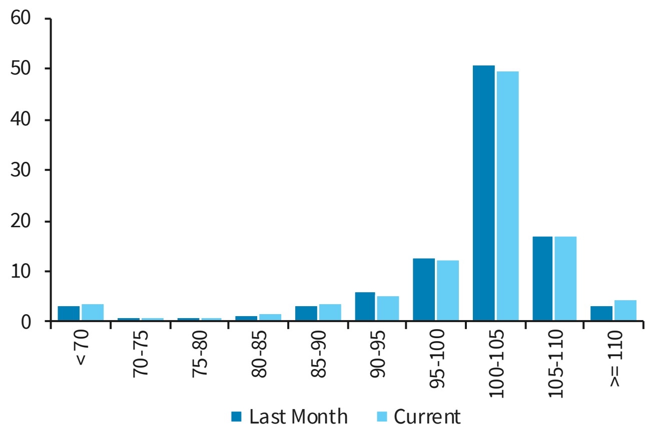
Source: Barclays Research

Flows to High Yield Mutual Funds and ETFs



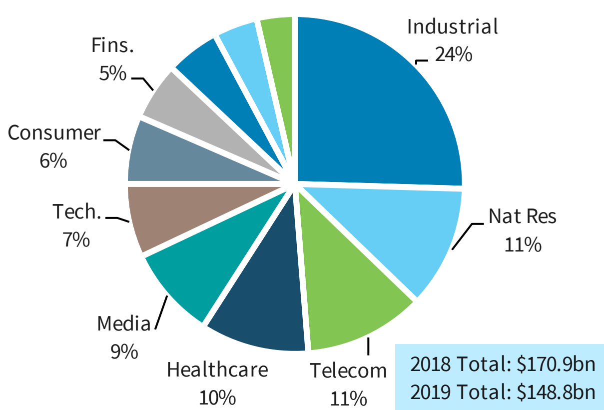
Note: Daily reporters only. Source: EPFR

High Yield Index Price Distribution by Par (%)



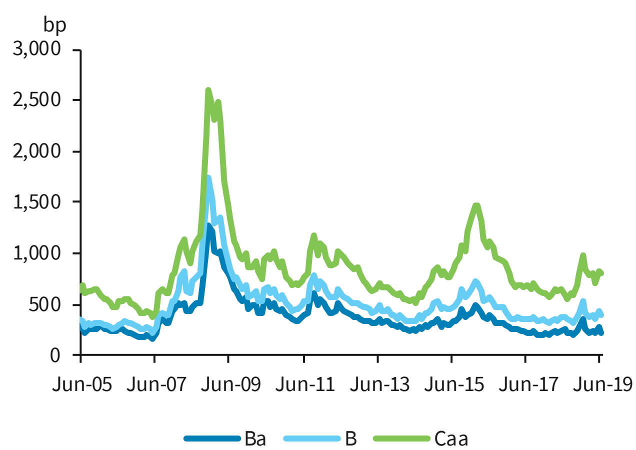
Source: Barclays Research

High Yield Supply by Sector



Note: 2019 new issue data as of July 24.
Source: Bloomberg Barclays Indices

High Yield Spreads by Credit Quality



Source: Bloomberg Barclays Indices

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