

Liquid Alternatives

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A European bank holiday on Monday and uncertainty about US-China trade talks hardly constrained credit trading, as an active primary calendar mid-week supported volumes overall. With a longer perspective, and as we noted last month, turnover in 1Q19 was highest for the largest issues in the high yield universe (*Greater Volumes for the Most Liquid Bonds*). We believe that their elevated trading volumes were propelled by the strong retail inflows in the quarter (\$10.6bn of inflows per Lipper), as retail funds tend to favor more liquid tranches, allowing them to increase and decrease risk in a somewhat more cost-efficient manner.

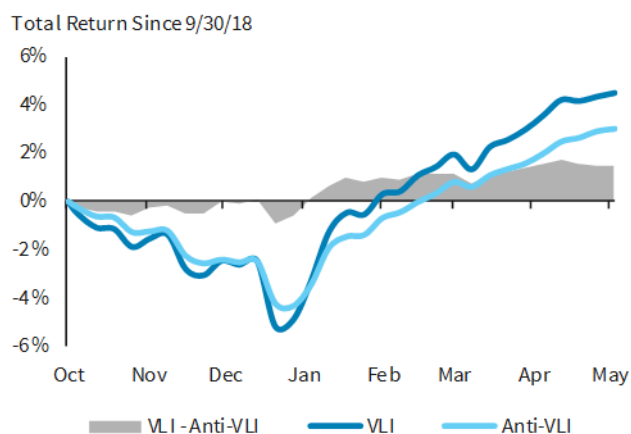
This preference has been evident in the underperformance of the most liquid segments of the market during 4Q18 (a period of heavy outflows), as well their outperformance in 1Q19 (when retail inflows were supportive). Figure 1 shows the performance of the US HY Very Liquid Index ("VLI"), which includes only US High Yield Index bonds that have at least \$500mn outstanding and were issued in the past five years. In this same vein, the VLI 800mn (which uses \$800mn issuance size as a threshold) has a 2019 year-to-date total return of over 10%, outpacing the VLI (9.3%) and the US High Yield Index (8.6%).

To explore any divergence in trading patterns across high yield, we created an index that we refer to as the "Anti-VLI," which is all bonds in the US High Yield Index that are not in the VLI and can therefore be used as a proxy for the "less liquid" bonds. As seen in the figure, the VLI underperformed the Anti-VLI in 4Q18, but has since outperformed significantly, resulting in a net 1.5% outperformance in total return since the start of October.

This trend was also evident in other periods in which the market similarly sold off followed by a quick rebound. Specifically, in August 2011-January 2012 and October 2015-March 2016, total returns were significantly negative in the first three months before bouncing back in the second half of each period.

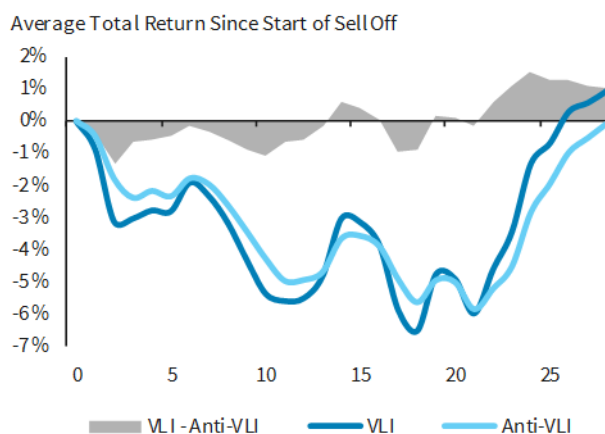
In terms of average total return, the VLI modestly lagged the Anti-VLI into the performance trough, followed by a larger rebound in the liquid names (Figure 2). Similar to 2019's rebound, both periods had dramatic retail inflows (over \$8bn in each during the rebounds), coincident with VLI outperformance.

FIGURE 1
The Very Liquid Index (VLI) Underperformed in the 4Q18 Sell-off but Has Outperformed in 2019's Rebound...



Source: Bloomberg Barclays Indices

FIGURE 2
...Similar to the Performance Divide in Past Sell-off and Subsequent Rally Periods



Notes: X-axis is in weeks. Past periods used are August 2011-January 2012 and

FIGURE 3

Comparing the VLI with Liquidity Cost Score (LCS) Based Indices of Similar Bond Count or Par Amount

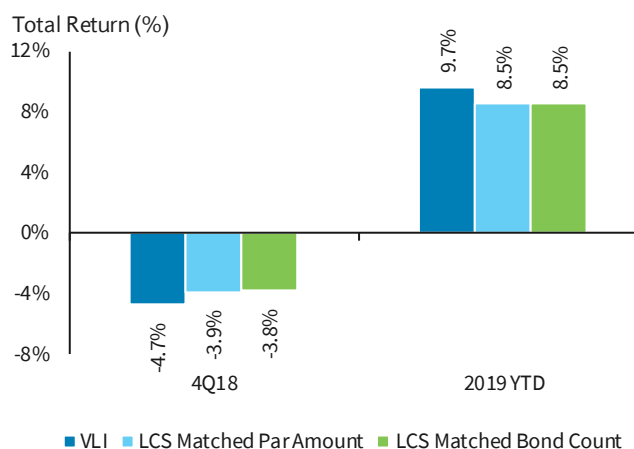
	US HY Very Liquid Index (VLI)	LCS Matched by Bond Count	LCS Matched by Par Amt
Bonds	844	844	922
Par Out (\$ bn)	759	702	759
Market Value (\$ bn)	759	714	765
Index Rating Number	15.1	14.8	14.9
OAD	3.8	3.6	3.7
OAS	315	263	265
Years since Issuance	2.2	3.2	3.2
Bond % Overlap with VLI		59%	59%
Par % Overlap with VLI		72%	71%

Note: As of September 28, 2018. Index rating number increases by 1.0 with each rating notch weaker. For example, 15 is B+ and 16 is B flat. Source: Bloomberg Barclays Indices

October 2015-March 2016. Source: Bloomberg Barclays Indices

FIGURE 4

Both LCS Matched Indices Outperformed the VLI in the Sell-off but Underperformed in the Rally



Source: Bloomberg Barclays Indices

While it is generally viewed as a good representation of the most liquid high yield bonds, the VLI uses issuance size as a determinant for liquidity, while there are other useful measures to track. Another measure of liquidity is Barclays' Liquidity Cost Score (LCS), an objective bond-level metric that captures bid-ask expressed as a percent of the bond's price as a proxy for the cost of an immediate, institutional-size, round-trip transaction (please see [LCS® Report - April 2019](#) for details regarding calculation method and recent metrics).

Using the most liquid bonds based on the LCS metric (smallest LCS), we created two custom indices that are the same size as the VLI, in terms of either amount outstanding or bond count. As of the end of September, the VLI contained 844 bonds (43% of bonds in the US High Yield Index) representing roughly \$759bn in par amount (60% of the US High Yield Index par). Using the start of 4Q18 as the reference date, our two LCS-based indices have roughly the same overlap with the VLI, in terms of bond count and amount outstanding, and are slightly better rated and lower spread than the VLI and have a smaller average issuance size. In addition, the duration of the VLI is longer and the average time since issuance is shorter than the two LCS indices, as a result of the exclusion from the VLI of all bonds issued more than five years ago.

The LCS-based indices outperformed the VLI total return terms by almost 1% in 4Q18 (Figure 4). Conversely, the VLI has outperformed the LCS-based indices in the market rally thus far this year, more than offsetting this underperformance in 4Q18. Some of this difference can be explained by the LCS indices' having bonds of tighter spreads, marginally higher ratings, and, hence, lower beta. But we also note that the substantial outflows of ETFs in 4Q18 (\$6.8bn) were coincident with the VLI underperformance, while the bounce-back of inflows (\$7.8bn) similarly overlapped VLI outperformance. This trend was seen in the two periods in Figure 2, although to a lesser extent, with ETF inflows in each rebound period exceeding mutual fund inflows.

In addition to the VLI, the iBoxx USD Liquid High Yield Index, another common benchmark for ETFs, uses issuance size as a liquidity hurdle for inclusion (\$400mn per issue and \$1bn per issuer across all issues). Roughly 84% of the iBoxx USD Liquid High Yield Index is also included in the VLI.

As a result, retail funds that have used issuance size as a measure of liquidity may have created a demand technical not enjoyed by select bonds in our custom indices that instead use LCS as a measure of liquidity. Given this technical, we believe that there has been some dislocation in performance, specifically between bonds in the VLI and those in our custom LCS-based indices. The larger theme that emerges is to screen for bonds that highlight value in otherwise similarly liquid securities when measuring liquidity by LCS and not just issue size and time since issuance. Specifically, we see executing a view on two fronts:

In Figure 5, we recommend buying bonds that meet all of the following criteria:

- in the LCS-based custom indices
- not in the VLI
- have year-to-date total returns trailing the average return of index-wide bonds with similar duration and are rated Overweight by Barclays' fundamental credit analysts.

In Figure 6, we present swaps within the same issuer and similar maturity where investors can:

- sell a bond that is included in the VLI but not in either of our LCS-based custom indices
- buy a bond that is not in the VLI but is included in both of our LCS-based custom indices and has otherwise underperformed the VLI-matched bond.

FIGURE 5

Select Bonds in the LCS-Based Indices with Total Return-Trailing Bonds of Similar Duration That Are Rated Overweight

Issuer	Ticker	Coupon (%)	Maturity Date	Sector	Analyst	Price (\$)	YTW (%)	OAD
Steel Dynamics	STLD	4.125	9/15/2025	Metals & Mining	Brian Lalli	99.1	4.3	4.0
MGM Resorts	MGM	7.75	3/15/2022	Gaming	Gregg Price	110.5	3.8	2.6
The Gap	GPS	5.95	4/12/2021	Retailers	Hale Holden	104.0	3.5	1.6
Sprint	S	6	11/15/2022	Wireless	Jeff Harlib	100.8	5.7	3.1
Sprint	S	7.125	6/15/2024	Wireless	Jeff Harlib	101.5	6.8	4.1
EMBARQ	EQ	7.995	6/1/2036	Wirelines	Jeff Harlib	98.6	8.2	8.9
Nuance	NUAN	6	7/1/2024	Technology	Jeff Harlib	102.4	4.8	2.2
DCP Midstream	DCP	6.45	11/3/2036	Midstream	Paul Chambers	102.2	6.2	10.5
CIT Group	CIT	5	8/15/2022	Finance Co.	Peter Troisi	104.3	3.6	3.0
CIT Group	CIT	5	8/1/2023	Finance Co.	Peter Troisi	104.2	3.9	3.8
HCA Healthcare	HCA	6.25	2/15/2021	Healthcare	Rishi Parekh	104.8	3.4	1.7

Source: Bloomberg Barclays Indices

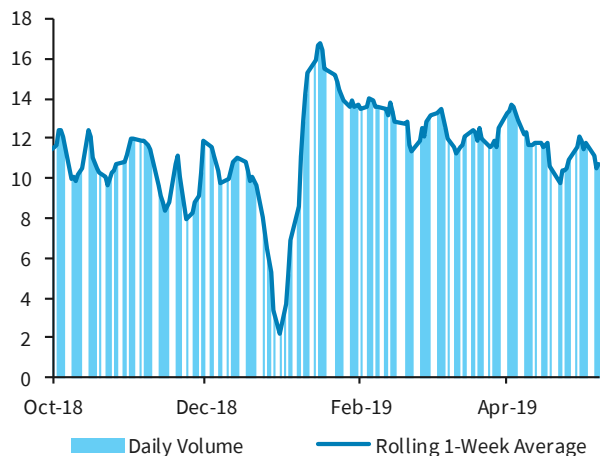
FIGURE 6

Matched Swaps from Bonds in the VLI to Bonds in LCS-Based Custom Indices That Have Underperformed on a Relative Basis

Issuer	Ticker	Sector	Swap Out of VLI Bond					Swap into LCS-Index Bond				
			Coupon (%)	Maturity Date	Price (\$)	YTW (%)	2019 YTD Total Return	Coupon (%)	Maturity Date	Price (\$)	YTW (%)	2019 YTD Total Return
CSC Holdings	CSCHLD	Cable Satellite	5.375	7/15/2023	102.3	4.3	6.6	6.75	11/15/2021	106.8	3.9	6.0
Intelsat Jackson	INTEL	Cable Satellite	8.5	10/15/2024	98.1	9.0	4.6	5.5	8/1/2023	89.8	8.4	4.2
Targa Resources	NGLS	Midstream	5.125	2/1/2025	102.1	4.5	10.6	5.25	5/1/2023	101.7	3.5	5.3
Sensata Tech	ST	Technology	5	10/1/2025	102.7	4.5	10.7	5.625	11/1/2024	106.6	4.3	9.8
Verisign	VRSN	Technology	5.25	4/1/2025	106.4	4.0	8.2	4.625	5/1/2023	101.5	3.8	4.7

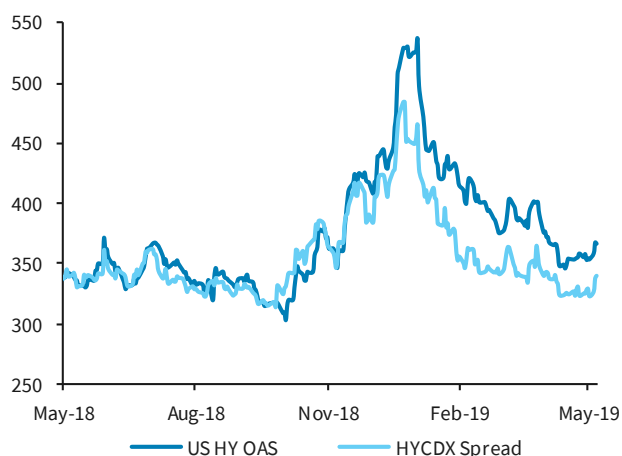
Source: Bloomberg Barclays Indices

High Yield Average Institutional Trade Volume (\$bn)



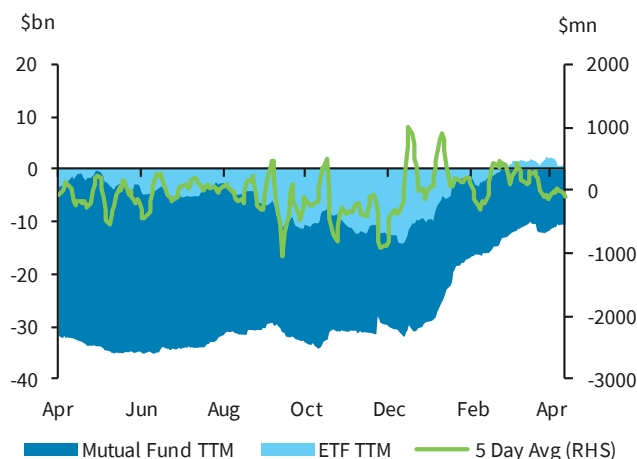
Note: Includes both registered and 144A volumes. Source: FINRA TRACE

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



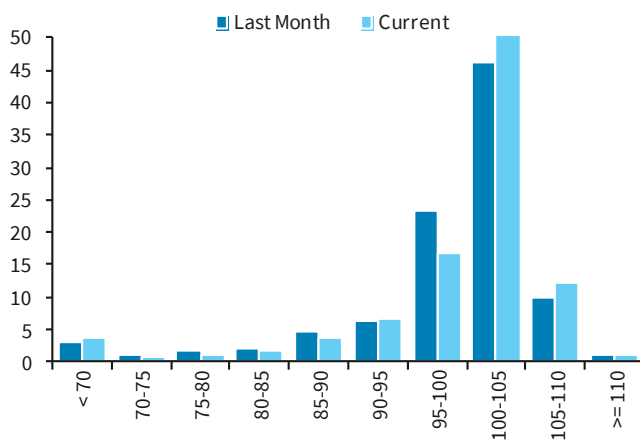
Source: Barclays Research

Flows to High Yield Mutual Funds and ETFs



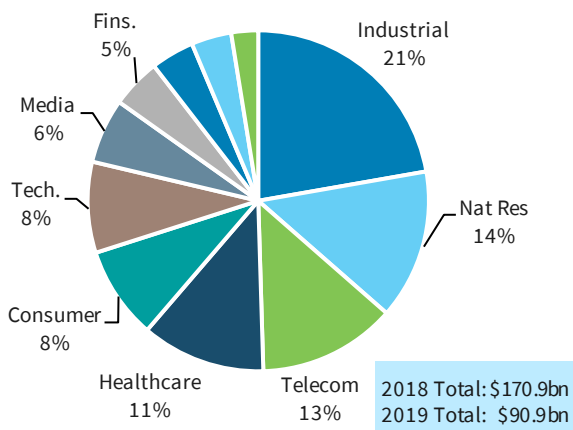
Note: Daily reporters only. Source: EPFR

High Yield Index Price Distribution by Par (%)



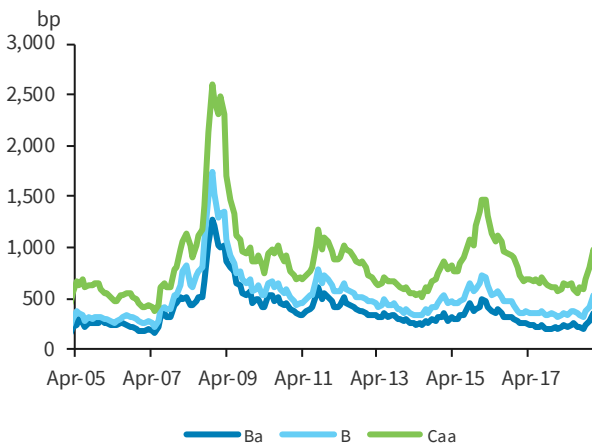
Source: Barclays Research

High Yield Supply by Sector



Note: 2019 new issue data as of May 8.
Source: Bloomberg Barclays Indices

High Yield Spreads by Credit Quality



Source: Bloomberg Barclays Indices

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CIT 5 08/01/23, Overweight (USD 103.88, 08-May-2019)

CIT 5 08/15/22, Overweight (USD 104.25, 08-May-2019)

CSC HOLDINGS LLC, A/CD/D/E/J/K/L/M

CSCHLD 6 3/4 11/15/21, Market Weight (USD 106.75, 08-May-2019)

CSCHLD 5 3/8 07/15/23, Market Weight (USD 102.00, 08-May-2019)

DCP MIDSTREAM OPERATING LP, A/CD/D/J/K/L/M

DCP 6.45 11/03/36, Overweight (USD 101.75, 08-May-2019)

EMBARQ CORP, CD/J/K/M

EQ 7.995 06/01/36, Overweight (USD 98.50, 08-May-2019)

GAP INC/THE, CD/CE/J

GPS 5.95 04/12/21, Overweight (USD 104.02, 08-May-2019)

HCA HEALTHCARE INC, A/CD/CE/D/J/K/L/M/N

HCA 6 1/4 02/15/21, Overweight (USD 104.75, 08-May-2019)

INTELSAT JACKSON HOLDINGS SA, CD/D/E/J/K/L/M/N

INTEL 5 1/2 08/01/23, Market Weight (USD 89.25, 08-May-2019)

INTEL 8 1/2 10/15/24, Market Weight (USD 97.25, 08-May-2019)

MGM RESORTS INTERNATIONAL, A/CD/CE/D/E/J/K/L/M

MGM 7.75 03/15/2022, Overweight (USD 110.38, 08-May-2019)

NUANCE COMMUNICATIONS INC, A/CD/CE/D/J/K/L/M

NUAN 6 07/01/24, Overweight (USD 102.63, 08-May-2019)

SENSATA TECHNOLOGIES BV, CD/D/J/K/L/M/N

ST 5 10/01/25, Market Weight (USD 102.25, 08-May-2019)

ST 5 5/8 11/01/24, Market Weight (USD 106.00, 08-May-2019)

SPRINT COMMUNICATIONS INC, CD/D/E/J/K/L/M/N
S 6 11/15/22, Overweight (USD 100.88, 08-May-2019)

SPRINT CORP, CD/CE/D/E/J/K/L/M/N
S 7 1/8 06/15/24, Overweight (USD 100.75, 08-May-2019)

STEEL DYNAMICS INC, CD/CE/J
STLD 4 1/8 09/15/25, Overweight (USD 98.75, 08-May-2019)

TARGA RESOURCES PARTNERS LP / TARGA RESOURCES PARTNERS FINANCE CORP, CD/D/E/J/K/L/M/N
NGLS 5 1/4 05/01/23, Market Weight (USD 101.50, 08-May-2019)
NGLS 5 1/8 02/01/25, Market Weight (USD 102.00, 08-May-2019)

VERISIGN INC, CD/CE/J
VRSN 4 5/8 05/01/23 (USD 101.25, 08-May-2019)
VRSN 5 1/4 04/01/25 (USD 105.88, 08-May-2019)

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