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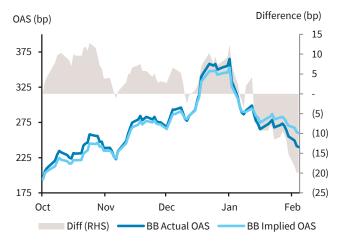
Bridging the Beta Divide

January's total return of over 4.5% ranks as the best month since 2011 and the best start to the year since 2009. Index-wide spreads rallied more than 125bp, to 400bp as of Wednesday's close, completely erasing December's move wider and bringing the US High Yield Index OAS back to levels last seen in mid-November. While a portion of the rally can certainly be credited to the Fed's dovish pivot, which has assuaged investors' concerns about a policy misstep in the near term, high yield technicals have also been supportive. Per EPFR, year-to-date retail inflows have totaled nearly \$8bn, reversing the trend of consistent outflows seen throughout 2018.

Dissecting the rally, we find a notable outperformance by higher-quality credit. When adjusted for the long-term beta of returns by rating cohort versus the broader high yield market over the past 20 years, the year-to-date performance of BBs stands out. Given the index-wide return of 5.25%, we would have expected BBs to generate a total return of just under 4% based on this long-run beta, about 100bp less than their actual year-to-date return. Conversely, the 7.5% beta-implied return of CCCs is 1.4% above their actual return. The single-B cohort has generally performed in line with its implied levels.

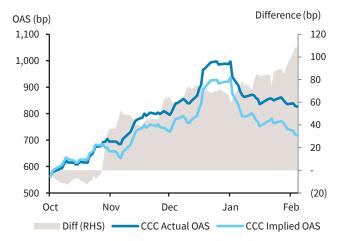
This outperformance of higher quality is also reflected in spread changes. When we look at BB spread moves since the start of October's widening, we find that the actual spread now trades 20bp tight of the beta-implied level based on the move of the Index (Figure 1). Conversely, CCCs now trade nearly 110bp wide of their beta-implied levels (Figure 3). As highlighted previously in *Imbalances in the Recent Sell-off and Rally*, large issuers have participated in the rally more than small issuers; this has supported the higher-quality rally because BB issuers are, on average, roughly 50% larger than single-B issuers and twice the size of CCC issuers.

FIGURE 1 CCCs Have Also Underperformed Their Sector-Adjusted Implied Returns So Far This Year



Note: Beta based on relationship between BB and US High Yield Index OAS since 1999. Source: Bloomberg Barclays Indices

FIGURE 2
...While CCCs Have Underperformed Their Beta-Implied
Level by More Than 100bp during the Same Period

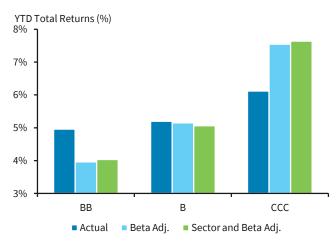


Note: Beta based on relationship between CCC and US High Yield Index OAS since 1999. Source: Bloomberg Barclays Indices

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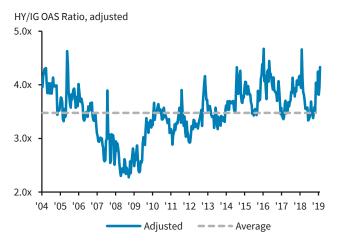
FIGURE 3
CCCs Have Also Underperformed Their Sector-Adjusted Implied Returns So Far This Year



Source: Bloomberg Barclays Indices

FIGURE 4

The High Yield/Investment Grade OAS Ratio Is Above Average on a Ratings- and Maturity Bucket-Adjusted Basis



Source: Bloomberg Barclays Indices

As we have shown previously (*Duration-Adjusted Compression*), rates can be a driving factor for the performance of different ratings buckets. But rates have been broadly unchanged in 2019, and as a result, duration does not explain ratings outperformance or underperformance this year.

The underperformance of lower-rated credit is also evident when we adjust for industry differences between rating buckets. For example, energy constitutes more than 20% of CCC market value, well above the index-wide level of 15%. This skew should have been a tailwind for CCC performance given that energy has returned 7.3% this year, well ahead of the index. As a result, we adjust the ratings buckets (BB, B, and CCC) to have sector weightings in line with the broader US High Yield Index to filter out performance driven by industry biases across the ratings cohorts. As seen in Figure 3, we find that CCCs have underperformed their sector-adjusted implied returns by 10bp. This sector-adjusted underperformance is in addition to the roughly 140bp of beta-adjusted underperformance.

The outperformance of quality has also been noticeable outside of high yield. As a result, the high yield to investment grade OAS ratio has grown from 3.0x at the start of October to 3.3x currently, slightly below the average of 3.5x over the past 15 years. That said, both the Investment Grade and High Yield Indices have had significant ratings and duration changes since before the crisis. When we hold rating and maturity bucket weights constant with precrisis levels for both IG and HY, the adjusted high yield to investment grade OAS ratio is 4.3x, well above the long-term adjusted average of 3.4x and the highest level since early 2018 (Figure 4).

Looking for months of performance similar to January 2019, there have been 22 other months since 2000 when index total returns were greater than 2%, BBs outperformed their long-term beta-implied returns, and CCCs underperformed their beta-implied levels. In the months following these instances, CCCs had a median total return of 1.5% (versus a median total return of 1.2% for BBs). Specifically, of these 22 months, CCCs outperformed their beta-implied level in 10. These data are a mixed bag regarding the mean regression of CCC performance to beta-implied levels. Single-name selection remains important in generating risk-adjusted returns in lower quality credit, as the data do not definitively show that CCCs either perform in line with or outperform their beta to the overall index in the months that follow.

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Given performance attribution year-to-date and what history suggests about the subsequent performance of CCCs in similar environments, it is important to also note that CCCs now represent just 14% of the market value of the US High Yield Index (down from a peak of 23% in October 2009). As the data above suggest, while CCCs do tend to outperform BBs in absolute terms following months similar to January 2019, they typically do not systemically outperform their historical beta. We suspect that the same will play out from here, with CCCs still lagging their upside beta to the overall market. In 2018, investors tried to insulate their portfolios from rising benchmark yields by owning higher-coupon debt. Today, with the Fed on hold and the market expecting little incremental uplift in Treasury yields from here, we believe that investors will be more circumspect about adding to CCCs.

Rather, we believe that investor focus on CCCs will likely be directed toward a handful of credits that do not lend themselves as easily to a broader strategy of embracing lower quality outright. As a result, in Figure 5, we highlight long CCC trade recommendations that were included in our recent top ideas report (see 1Q19 Fundamental Focus Theme and Top Ideas for the full list of recommendations, including fundamental analyst commentary.

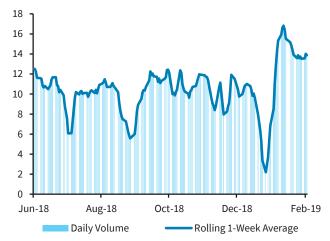
FIGURE 5
Select CCC Trade Recommendations

Issuer	Ticker	Trade	OAS (bp)	YTW (%)	Sector	Barclays Rating
Inspire Brands	ARGIHC	Buy ARGIHC 2026s	492	7.73	Restaurants	Not Rated
Chobani	CHBANI	Buy CHBANI 2025s	748	10.11	Food & Beverage	Not Rated
Pyxus	PYX	Buy PXY 9.875% 2021s	1736	19.84	Tobacco	Overweight
Transocean	RIG	Buy RIG 7.25% 2025s	563	8.38	Oil Field Services	Overweight
Endo	ENDP	Buy ENDP 2022s	869	11.26	Pharmaceuticals	Overweight
Endo	ENDP	Buy ENDP 2025s	655	9.05	Pharmaceuticals	Overweight
Multiplan	MLTPLN	Buy MLTPLN 2024s	664	9.14	Healthcare	Not Rated
Multiplan	MLTPCO	Buy MLTPCO 2022s	423	7.16	Healthcare	Not Rated

Source: Barclays Research

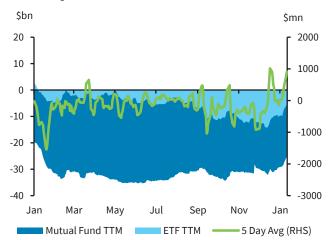
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High Yield Average Institutional Trade Volume (\$bn)



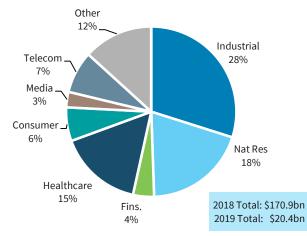
Note: Includes both registered and 144A volumes. Source: FINRA TRACE

Flows to High Yield Mutual Funds and ETFs



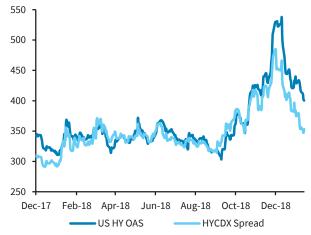
Note: Daily reporters only. Source: EPFR

High Yield Supply by Sector



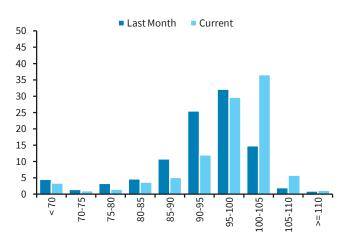
Source: Bloomberg Barclays Indices

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



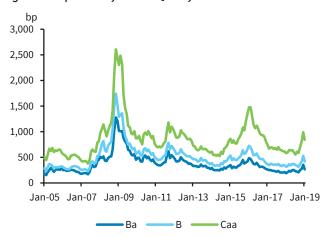
Source: Barclays Research

High Yield Index Price Distribution by Par (%)



Source: Barclays Research

High Yield Spreads by Credit Quality



Source: Bloomberg Barclays Indices

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Analyst Certification

We, Rizwan Hussain, Bradley Rogoff, CFA and Scott Schachter, hereby certify (1) that the views expressed in this research report accurately reflect our personal views about any or all of the subject securities or issuers referred to in this research report and (2) no part of our compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this research report.

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Materially Mentioned Issuers/Bonds

CHOBANI LLC / CHOBANI FINANCE CORP INC. CD/I

CHBANI 7 1/2 04/15/25 (USD 88.00, 06-Feb-2019)

ENDO DAC / ENDO FINANCE LLC / ENDO FINCO INC, CD/J

ENDP 6 02/01/25, Overweight (USD 77.50, 06-Feb-2019)

Valuation Methodology: Based on our stressed analysis, we believe there is coverage and it is more attractive on a market adjusted basis. The company has liquidity options and ample secured capacity to consider priority tenders on the unsecured notes. Furthermore, we believe Xiaflex (ex Cellulite) covers nearly 20% of the debt, we remain positive on Par (FTF and FTM and FDA commissioner's generic focus), and we are positive on the management team.

We rate the Secured 2024 notes UW due to relative value. The term loan trades at 7% or 120bp wide to the term loan.

Risks that May Impede Achievement of the Rating: Headline risk and general pressure in the sector. Levels may decline under certain events. Other risks include unfavorable litigation, competition for Vasostrict, increased rebids in generic market, and higher liability accruals (discredits).

Leverage through the secured notes is 2.8x and may garner interest due to the secured status (possibly ahead of certain litigation claims).

ENDO FINANCE LLC, CD/J

ENDP 5 3/4 01/15/22, Overweight (USD 91.50, 06-Feb-2019)

Valuation Methodology: Based on our stressed analysis, we believe there is coverage and it is more attractive on a market adjusted basis. The company has liquidity options and ample secured capacity to consider priority tenders on the unsecured notes. Furthermore, we believe Xiaflex (ex Cellulite) covers nearly 20% of the debt, we remain positive on Par (FTF and FTM and FDA commissioner's generic focus), and we are positive on the management team.

We rate the Secured 2024 notes UW due to relative value. The term loan trades at 7% or 120bp wide to the term loan.

Risks that May Impede Achievement of the Rating: Headline risk and general pressure in the sector. Levels may decline under certain events. Other risks include unfavorable litigation, competition for Vasostrict, increased rebids in generic market, and higher liability accruals (discredits).

Leverage through the secured notes is 2.8x and may garner interest due to the secured status (possibly ahead of certain litigation claims).

IRB HOLDING CORP. CD/D/I/K/L/M

ARGIHC 6 3/4 02/15/26 (USD 94.75, 06-Feb-2019)

 ${\bf MPH\ ACQUISITION\ HOLDINGS\ LLC,\ CD/D/J/K/L/M}$

MLTPLN 7 1/8 06/01/24 (USD 100.00, 06-Feb-2019)

POLARIS INTERMEDIATE CORP, CD/I

MLTHCO 8 1/2 12/01/22 (USD 97.13, 06-Feb-2019)

PYXUS INTERNATIONAL INC, CD/CE/J

PYX 9 7/8 07/15/21, Overweight (USD 81.00, 06-Feb-2019)

Valuation Methodology: We rate the second liens Overweight, given that the tailwind from the legalization of cannabis in Canada and the passing of the US farm Act could lead to more confidence in the credit story and the potential for refinacing.

Risks that May Impede Achievement of the Rating: AOI operates in multiple emerging markets, which results in elevated operating risk. In addition, it is highly leveraged and is subject to various tobacco/commodity crop risk. If the company generates greater free cash flow than we expect and/or trends get worse, it could create risk to our Overweight.

TRANSOCEAN INC, A/CD/D/J/K/L/M/N

RIG 7 1/4 11/01/25, Overweight (USD 94.13, 06-Feb-2019)

Valuation Methodology: With Transocean's weighting in the High Yield oil services index growing to 20%, we see its benchmark GTD 2025 bonds as attractively priced at a YTW of ~8.6%. As confidence returns to the sector, we should see this bond (and the 2026s) outperform as investors gravitate to RIG for its relative size in the index.

Risks that May Impede Achievement of the Rating: Weaker oil prices and Offshore does not recover to our forecast for 2020.

All pricing information is indicative only. Prices are sourced from Refinitiv as of the last available closing price at the time of production of the research report, unless another time and source is indicated.

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For sectors rated against the Bloomberg Barclays U.S. Credit Index, the Bloomberg Barclays Pan-European Credit Index, the Bloomberg Barclays EM Asia USD

High Grade Credit Index or the Bloomberg Barclays EM USD Corporate and Quasi-Sovereign Index, the analyst expects the six-month excess return of the sector to exceed the six-month excess return of the relevant index.

For sectors rated against the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index, the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, the Bloomberg Barclays Pan-European High Yield Finance Index or the Bloomberg Barclays EM Asia USD High Yield Corporate Credit Index, the analyst expects the six-month total return of the sector to exceed the six-month total return of the relevant index.

Market Weight (MW):

For sectors rated against the Bloomberg Barclays U.S. Credit Index, the Bloomberg Barclays Pan-European Credit Index, the Bloomberg Barclays EM Asia USD High Grade Credit Index or the Bloomberg Barclays EM USD Corporate and Quasi-Sovereign Index, the analyst expects the six-month excess return of the sector to be in line with the six-month excess return of the relevant index.

For sectors rated against the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index, the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, the Bloomberg Barclays Pan-European High Yield Finance Index or the Bloomberg Barclays EM Asia USD High Yield Corporate Credit Index, the analyst expects the six-month total return of the sector to be in line with the six-month total return of the relevant index.

Underweight (UW):

For sectors rated against the Bloomberg Barclays U.S. Credit Index, the Bloomberg Barclays Pan-European Credit Index, the Bloomberg Barclays EM Asia USD High Grade Credit Index or the Bloomberg Barclays EM USD Corporate and Quasi-Sovereign Index, the analyst expects the six-month excess return of the sector to be less than the six-month excess return of the relevant index.

For sectors rated against the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index, the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, the Bloomberg Barclays Pan-European High Yield Finance Index or the Bloomberg Barclays EM Asia USD High Yield Corporate Credit Index, the analyst expects the six-month total return of the sector to be less than the six-month total return of the relevant index.

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Overweight (OW): The analyst expects the six-month excess return of the issuer's index-eligible corporate debt securities to exceed the six-month expected excess return of the relevant sector.

Market Weight (MW): The analyst expects the six-month excess return of the issuer's index-eligible corporate debt securities to be in line with the six-month expected excess return of the relevant sector.

Underweight (UW): The analyst expects the six-month excess return of the issuer's index-eligible corporate debt securities to be less than the six-month expected excess return of the relevant sector.

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Overweight (OW): The analyst expects the six-month total return of the debt security subject to this rating to exceed the six-month expected total return of the relevant sector.

Market Weight (MW): The analyst expects the six-month total return of the debt security subject to this rating to be in line with the six-month expected total return of the relevant sector.

Underweight (UW): The analyst expects the six-month total return of the rated debt security subject to this rating to be less than the six-month expected total return of the relevant sector.

Rating Suspended (RS): The rating has been suspended temporarily due to market events that make coverage impracticable or to comply with applicable regulations and/or firm policies in certain circumstances including where the Investment Bank of Barclays Bank PLC is acting in an advisory capacity in a merger or strategic transaction involving the company.

Coverage Suspended (CS): Coverage of this issuer has been temporarily suspended.

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Market Weight (MW):

The analyst expects the six-month excess return of the country's index eligible bonds to be in line with the six-month excess return of the Bloomberg Barclays EM USD Sovereign Index.

Underweight (UW):

The analyst expects the six-month excess return of the country's index eligible bonds to be less than the six-month excess return of the Bloomberg Barclays EM USD Sovereign Index.

Rating Suspended (RS):

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