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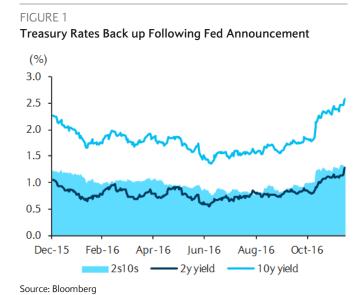
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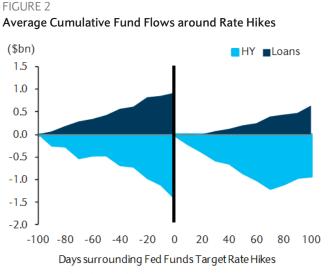
Flowing through a Fed Hike

On Wednesday, the FOMC raised its fed funds target range by 25bp, from 25-50bp to 50-75bp. The decision should not have come as a surprise to market participants, as tightness in labor markets and firm inflation pointed in the direction of a hike. While rates markets were pricing in a hike with near certainty for several weeks, an adjustment in the expected path of policy led to higher yields across the rates curve, with the dots now indicating a median of three hikes in 2017. In the immediate aftermath of the announcement, 2y and 10y yields ended 10bp higher, and the 30y was up 5bp (Figure 1).

The effects of rate hikes on sentiment are varied for retail investors across leveraged financed markets, but they create an important technical nonetheless. High yield markets are particularly sensitive to the technical given that retail funds represent roughly 40-50% of the ownership base. Over the short term, high yield retail funds typically suffer withdrawals, which, in turn, can result in a positive correlation between rates and high yield spreads. Admittedly, the recent experience has been quite the opposite; after significant outflows in November, high yield retail demand has been strong, and inflows have totaled \$1.6bn for the past three weeks, according to Lipper, as the effects of higher oil prices and the prospect of strong fiscal stimulus have generally buoyed demand for risk assets.

While they represent a smaller portion of the loan buyer base (13-17%), retail funds are still an important component of the loan market. Leading up to this week's FOMC decision, loan funds have recorded their largest absolute weekly inflow of \$1.2bn since 2013, bringing total returns for the S&P/LSTA Leveraged Loans Index to 9.7% for the year through Wednesday. We believe that investors will continue to add exposure to loan mutual funds as Libor increases with the fed funds rate. Three-month Libor (97bp) has nearly reached the level of the average floor (98bp) and will soon start to contribute to carry returns (please see *Floating Past Libor Floors*, September 9, 2016). Our rates strategists project that 3m Libor will reach 150bp by the end of 2017, which should well surpass the average Libor floor and help support valuations.





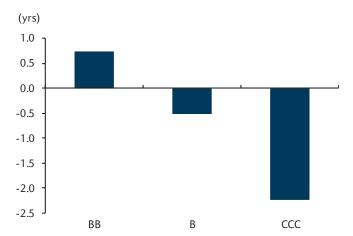
Source: Lipper, Bloomberg, Federal Reserve

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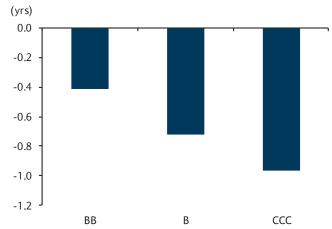
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FIGURE 3
High Yield Empirical Duration by Quality



Note: Empirical duration calculated by adjusting the OAD by the spread beta to the 5y Treasury. Source: Bloomberg Barclays Indices, Bloomberg

FIGURE 4
Leveraged Loan Empirical Duration by Quality



Note: Empirical duration calculated as beta of price return of the S&P Leveraged Loan Index to an increase in the 5y Treasury yields. Source: Bloomberg, S&P LCD

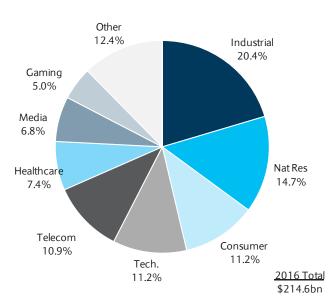
Nonetheless, given our expectation that front-end rates will continue to increase, it is important to understand how retail investors have reacted historically to increases in the fed funds target rate. To that end, we conducted an event study examining the cumulative fund flows around rate hikes (Figure 2). For the 100-day period leading up to the event, high yield funds typically endured cumulative redemptions totaling -\$1.4bn, which then continued over the next 100 days. Meanwhile, consistent with our expectations and recent trends, loan funds saw average cumulative inflows of around \$900mn coming into the event. The strong demand continued past the event, as another \$640mn subsequently entered the product, on average.

While higher rates may pressure high yield spreads in the near term, the effects gradually reverse over the medium and longer terms, as outlined in our *Global Credit Outlook* (page 45). Notwithstanding the recurrence of an event such as the taper tantrum in which the correlation between rates and spreads turns positive, lower quality debt should be better insulated from sharp rate moves. Indeed, using weekly spread data since the early 2000s, we find that CCC high yield debt is, in fact, characterized by an empirical duration of -2.20, while B and BB have empirical durations of -0.50 and 0.73, respectively (Figure 3). Loan markets follow a similar pattern, as CCC loans carry an empirical duration of -1.0, compared with -0.7 and -0.4 for the B and BB cohorts (Figure 4).

Although these findings imply that lower quality instruments should outperform slightly for an increase in rates, the current path of policy could be more prolonged and uncertain and, therefore, fall out of sample. That said, these findings generally give us more confidence that lower quality will be well supported in 2017 if rates continue to trend higher.

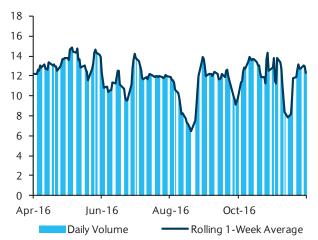
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High Yield Supply by Sector



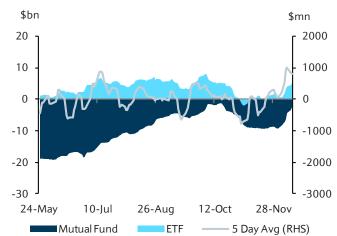
Source: Barclays Research

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: $\ensuremath{\mathsf{EPFR}}$

Top On-the-Run CDX Index Names by Weekly CDS Volume

	Notional Outstanding (\$bn)		Volume – Week Ending 12/9/16 (\$mn)	
	Gross	Net	Gross	
MBIA Insurance	15.7	0.8	298.5	
iHeart Comm.	8.9	0.9	283.3	
AK Steel	3.2	0.4	211.3	
U.S. Steel	5.6	0.7	145.8	
Frontier	7.6	0.9	139.2	
Tesoro	3.2	0.3	136.0	
ILFC	9.0	1.0	128.5	
Chesapeake	6.8	0.6	124.1	
Olin Corp	4.3	0.4	112.3	
Dell	6.9	0.7	107.3	
Chesapeake Olin Corp	6.8 4.3	0.6	124.1 112.3	

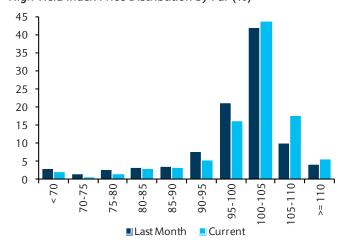
Source: DTCC

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



Source: Bloomberg Barclays Indices, Barclays Research

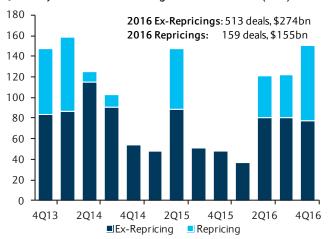
High Yield Index Price Distribution by Par (%)



Source: Bloomberg Barclays Indices, Barclays Research

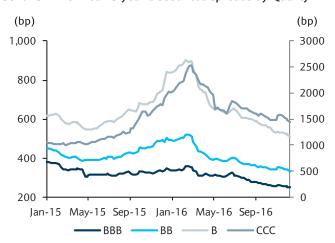
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Quarterly Institutional Leveraged Loan Issuance (\$bn)



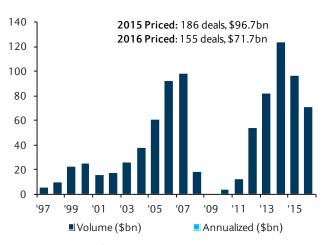
Source: S&P LCD, Barclays Research

S&P/LSTA Lev Loan 3 year discounted spreads by Quality



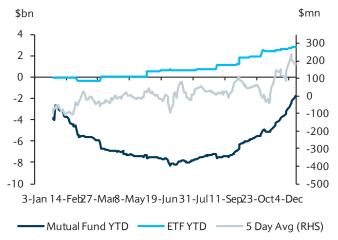
Note: CCC spreads are shown on the RHS. Source: S&P LCD

Annual CLO Issuance



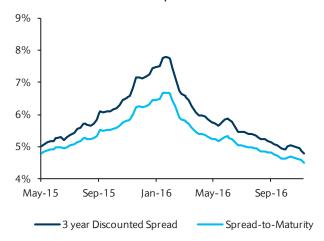
Source: S&P LCD, Creditflux

Flows to Loan Mutual Funds and ETFs



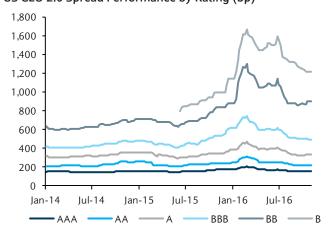
Note: Five-day average includes only flows of daily reporters. Source: EPFR

S&P/LSTA Lev Loans Index Spreads



Source: S&P LCD

US CLO 2.0 Spread Performance by Rating (bp)



Note: Spread data from BWIC levels. Source: Moody's, Intex, Barclays Research

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