

### Drilling for signs of bank duress

As we enter into the final quarter of 2016 we fear just 3 events that have the potential to derail our base case of a slow grind tighter into year-end: a shock to the financial system precipitated by ailing banks, another collapse in oil prices, and a weak US jobs print. Two of our three uncertainties were addressed and dismissed last week as the market weathered both the woes of Deutsche Bank and another OPEC meeting, where it appears the cartel is willing to work together to freeze or reduce crude output beginning in November.

### Down in quality or out the curve?

In our view, not only is the pull from foreign investors to safe yield strong, but the case can be increasingly made for why high yield in particular could be the beneficiary of a further draw of capital. However, we would prefer to enhance portfolio beta through careful addition of credit risk rather than reaching out the curve. Although we don't think low rates are going away any time soon, in our opinion valuations and rate sensitivity are overlooked as meaningful concerns in the market at the moment. And even though we remain uncomfortable with high yield fundamentals, our view is predicated on technicals and the belief that earnings will unlikely influence spread direction over the last quarter.

### Flows:

US HY recorded a sizable \$2.08bn (+0.9%) net inflow last week after the Fed elected not to raise rates and the BOJ announced their intention to keep the 10yr near its current level of 0%. Loans also recorded inflows to the tune of \$557mn (+0.7%),

### Issuance:

High yield issuance slowed down to \$1.68bn this past week after the previous 2 weeks' \$6.89bn and \$7.96bn respectively. Although global loan issuance also modestly declined from its recent pace, the loan market remained heavily active with \$9.4bn out of the United States. September concluded with \$54.23bn in US Loan issuance, surpassing April 2007's \$53.25bn for the largest ever dollar amount in a single month.

### Performance:

Performance was strong in the first half of the week as the BOJ and Fed announcements created a bid for risk, though this faded in the back half of the week due to increased stress within the banking sector. US HY performed well with a +0.29% gain, led by triple-Cs (+0.57%).

High Yield Strategy  
Global

---

**Michael Contopoulos**

HY Credit Strategist  
MLPF&S  
+1 646 855 6372  
[michael.contopoulos@baml.com](mailto:michael.contopoulos@baml.com)

**Michael John**

HY Credit Strategist  
MLPF&S  
+1 646 855 6743  
[michael.john@baml.com](mailto:michael.john@baml.com)

**Neha Khoda**

Credit Strategist  
MLPF&S  
+1 646 855 9656  
[neha.khoda@baml.com](mailto:neha.khoda@baml.com)

**Rachna Ramachandran**

Quant Rel Value Strategist  
MLPF&S  
+1 646 855 7927  
[rachna.ramachandran@baml.com](mailto:rachna.ramachandran@baml.com)

### Recent BofA Merrill Lynch Global Research Reports

Title: Subtitle	Primary Author	Date Published
<a href="#">The HY Note: BOJ and FOMC should spark HY buying</a>	Michael Contopoulos	23 September 2016
<a href="#">The High Yield Flow Report: High yield steals the flow</a>	Michael Contopoulos	29 September 2016
<a href="#">The High Yield Flow Report: Flows moderate after FOMC</a>	Michael Contopoulos	22 September 2016
<a href="#">RV Brief: Get the fall rolling: CDX HY27 update</a>	Michael Contopoulos	21 September 2016

BofA Merrill Lynch does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Refer to important disclosures on page 14 to 15. Analyst Certification on page 13. COAS Certification on page 13.

11670741

Timestamp: 04 October 2016 06:00AM EDT

# The View From Above

---

## Drilling for signs of bank duress

As we enter into the final quarter of 2016 we fear just 3 events that have the potential to derail a slow grind tighter into year-end: a shock to the financial system precipitated by ailing banks, pension funds and insurance companies and exacerbated by low interest rates globally; another collapse in oil prices that corresponds with low growth and fears of recession; or a weak US jobs print that shakes investor confidence in the Fed's ability to generate growth and inflation. Two of our three uncertainties were addressed and dismissed last week as the market weathered both the woes of Deutsche Bank and another OPEC meeting, where it appears the cartel is willing to working together to freeze or reduce crude output beginning in November.

We have said in the past that we have never had strong financial markets without a strong banking system, and have been wary that the low interest rate environment and the challenges a flat yield curve present to banks can be a persistent state of the world. In fact, our biggest fear after speaking with innumerable international clients has been that BOJ Governor Kuroda and ECB President Draghi would begin to signal less accommodative action given the impact of low rates on the financial system. Coupled with unclear evidence that inflation and growth has picked up given negative deposit rates, and any shift in central bank policy that indicates a removal of accommodative action would likely have extreme consequences to the capital flow argument in the "reach for yield" camp.

And although Deutsche Bank's problems are not entirely created by low rates, but rather the profitability challenges they create for an institution hobbled by post crisis regulation where all banks need to maintain large liquidity reserves, the ripple effects from a bank that could have potentially lost the confidence of the market likely would have sparked fears for the entire global financial system. And although our equity analysts feel that DBK has insufficient earning's power to achieve the future minimum reserve requirement, and as a consequence will be forced into a capital raise, the rumoured smaller DOJ settlement (\$5.4bn) related to the packaging, issuing and marketing of mortgage securities likely helps restore some degree of confidence in the firm's ability to weather the storm.

In the case of OPEC's decision to limit crude production, we see the likelihood of a steep decline in prices as now remote. As our [Commodity Strategists note](#), the balance of risks have shifted to the upside, after news from Libya, Nigeria and Kashagan tilted them to the downside two weeks ago. Even after adjusting for higher Kashagan crude production and somewhat lower OPEC output, they leave their forward oil balances roughly unchanged. As a consequence, our strategists believe WTI will average \$59/bbl next year with a high point of \$69/bbl in Q2. Although we entered last week a bit nervous about the Energy space – after all, for the same level of WTI matched issuer spreads are 90bp tight today than 1 year ago -we remain constructive on Energy and E&P in particular. Though the bulk of the tightening has likely occurred since the lows on February 11<sup>th</sup>, we think as crude prices trend higher and earnings improve, the space has room to further compress.

## Weekly Recap

High yield spreads continued to tighten last week as the market was able to successfully weather signs of stress from within the banking sector. Energy spreads significantly outperformed with 55bps of tightening after OPEC agreed to a cap on oil production for the first time in 8 years, sending WTI prices up over 10%. High yield issuance slowed down to \$1.68bn this past week after the previous 2 weeks' \$6.89bn and \$7.96bn respectively. Although global loan issuance also modestly declined from its recent pace, the loan market remained heavily active with \$9.4bn priced out of the United States.

## Down in quality or out the curve?

Given the strength of technicals and a modestly improved fundamental picture, our base case for the last quarter of the year is a slow grind tighter. In our view, not only is the pull from foreign investors to safe yield strong, but the case can be increasingly made for why high yield in particular could be the beneficiary of a further draw of capital. First, although BBs in particular are more rate sensitive than they have ever been, relative to IG and treasuries, high yield is likely to be the least impacted of credit products if central banks decide to pull back on stimulus or shift their rhetoric on negative interest rate policy. Additionally, FX hedging costs are limiting the upside in Japanese dollar investors and we think these foreign investors in particular will likely search out higher yielding product to offset their costs. Second, with 92% of benchmark mutual fund high yield portfolios greater than \$1bn in size underperforming their index, we believe some PMs may be incentivized to chase performance headed into year end. This is exactly the opposite of what we saw last year, when investors pulled back on risk and sold into weakness to "start fresh" in 2016. As we head into 2017, however, sentiment has changed, and long-only shops may be looking to increase risk headed into what is often a new year "pop".

In our view, however, searching for yield should not be indiscriminate; and based on recent trends our clients feel the same way. The lack of frenzy for paper is what so far has differentiated this rally from those that existed in 2013 and the beginning of 2014. However, there are signs that some froth may be returning to the market and in our view the question is, would you rather own credit risk or duration risk in the search for yield? Right now, we prefer the latter, though as we have highlighted for several months, believe there are ways to enhance portfolio beta without an over the top increase in risk.

## An evolving world deserves an evolving strategy

About a year ago we coined the term "a rolling blackout" to characterize the default environment we're currently living through. The idea, we noted, is that individual sectors and types of companies experience their own unique moment of distress while the rest of the market remains resilient. Energy, Metals and Mining clearly represent the two most recent sectors realizing discreet bankruptcy risk, with perhaps Retail or Durable Goods coming down the line later next year into 2018. We have also noted that in a low-liquidity environment where poor fundamentals define the market, the risk for a total blackout increases exponentially, as fear and poor earnings create a negative feedback loop between investors, CEOs and CFOs and ultimately the consumer.

Generally, there are two fixes for the downward spiral: 1) earnings improve, confidence is restored, and the highest risks remain discreet and/or 2) valuations become too attractive to ignore, capital floods to the markets, credit lines become available, and businesses extend their lifelines. On the back of 2) earlier in the year we recommended that client's barbell their portfolio by adding long duration high quality paper in BBs and BBBs and names that have sold off the hardest (not necessarily triple Cs, but generally higher risk names). The idea, we reasoned, was that investors should want to own the names that have already sold off the most, while protecting themselves for broader

Table 1: Spreads, yields, and returns

Index	OAS	1W-Chg	1M-Chg	YTW	WoW Return	YTD Return
US HY	503	-14	-11	6.31	0.41%	15.16%
ex-Energy	485	-8	2	6.12	0.25%	12.29%
ex-Materials	504	-13	-9	6.32	0.35%	13.78%
ex-E&M	484	-5	6	6.11	0.23%	10.94%

Source: BofA Merrill Lynch Global Research

contagion with safe credits. Rate risk was of little concern, as in our view, central banks would remain incredibly accommodative and rates were likely headed lower, not higher.

As the year has waned, however, we have shifted our strategy despite attractive returns in the barbell approach. One reason for our move has been our lack of comfort with a reliance on central banks to maintain low rates forever. Our thought process now is as follows: BBs have rallied significantly and fundamentals have improved, if even marginally. When coupled with central banks that are likely to maintain low rates, though likely not forever negative, we think investors will be forced to continue to reach for yield. However, when faced with adding duration or credit risk, we think valuations coupled with rate risk will nudge investors down in quality.

### Out the curve may eventually lead to out of luck

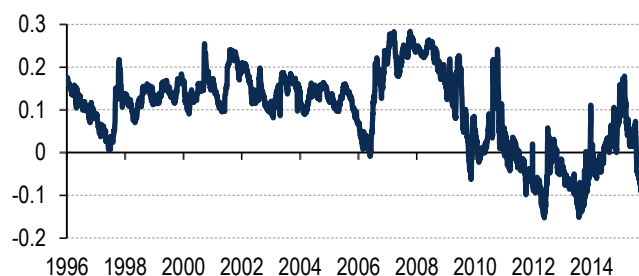
Here we think it's important to note Kuroda's policy move 2 weeks ago where he acknowledged the impact of a flat yield curve on the performance of the financial sector, and his solution to peg the 10y JGB at 0%. Although not taken as a hawkish policy stance, we do think central banks could begin to add financial stability to their list of priorities (growth and inflation). In our view, this would imply higher rates and steeper curves. Couple a potential global central bank policy shift with a Fed that seems sure to hike in December, and although high yield has historically tightened 1 for 1 with moves higher in treasuries, we think the negative convexity of the market may result in a different reaction this go around.

Chart 1: HY spread beta to 5yr treasury



Source: BofA Merrill Lynch Global Research, Bloomberg

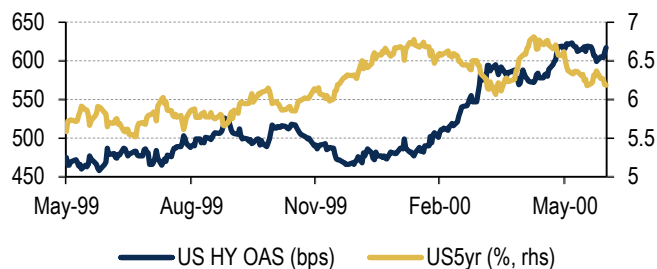
Chart 2: HY effective convexity



Source: BofA Merrill Lynch Global Research

This is not to say that we think low rates are going away anytime soon. In fact, we believe central banks will remain highly accommodative for some time to come. However, we also believe valuations and rate sensitivity are overlooked as meaningful concerns in the market, and should inflation actually begin to pick up, and the Fed need to get more aggressive, we have seen periods in history where rising rates has resulted in poor high yield performance. See the time between 1999 and 2000 below where spreads widened into higher rates (a stretch we think is strikingly similar to today). Of course we know in 2013 during the taper tantrum high yield spreads backed up over 100bp and just recently we saw high yield duration underperform significantly during the month of September as longer dated paper was unable to recover after the backup in the 10Y in the middle of the month.

**Chart 3: Spreads can widen into higher rates (1999-2000 HY OAS vs 5yr treasury)**



Source: BofA Merrill Lynch Global Research, Bloomberg

**Table 2: Longer dated HY couldn't recover from mid-Sep rate increase**

	Years to Maturity									
	<2	2..	3..	4..	5..	6..	7..	8..	9..	10+
BB1	0.1	0.0	0.0	0.1	0.0	-0.1	-0.2	-0.4	-1.1	0.0
BB2	0.2	0.3	0.5	0.4	0.4	0.6	0.0	0.1	-0.2	0.4
BB3	-0.5	0.3	0.3	0.0	0.3	0.0	-0.2	-0.2	-0.5	-1.1
B1	0.2	0.4	0.5	0.5	0.1	0.2	-0.4	-0.5	-0.5	-0.6
B2	0.0	0.6	0.4	0.1	0.2	0.1	1.1	-0.2		
B3	0.3	0.2	0.9	0.8	1.3	1.0	0.5	0.3		5.7
CCC1	1.1	1.4	1.2	1.0	0.8	-0.2	0.4			
CCC2	1.3	2.3	2.6	1.7	2.9	0.2				
CCC3		1.2	1.1	1.2						
CC/C	5.0	-1.9	0.0	3.3						

Source: BofA Merrill Lynch Global Research

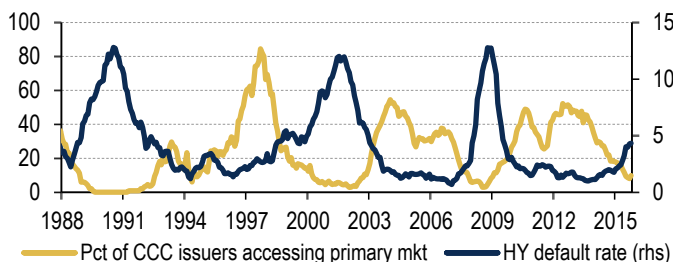
### Down in quality should lead up in returns - for now

With rate risk coupled with tight valuations limiting the opportunities to add yield safely, we think the next area of high yield to realize strong returns will come from lower quality paper. Although we are uncomfortable with fundamentals, our view is predicated on technicals and the belief that earnings will unlikely influence spread direction over the last quarter. But with a cautious approach in mind, we prefer to first reach down in quality via loans and secured paper before dropping down to unsecured B or CCC paper. Our clients seem to be thinking along the same lines: CCC bond issuance still hasn't come back from near recessionary type levels, for example, while risk tolerance seems to be growing in the loan market.

In fact, the below chart on CCC issuance is one that is suggestive of a peak default rate (i.e. end of business cycle) next year; any time fewer than 20% of all CCC issuers tap the primary market over a 12 month horizon the default rate has reached double digits within 16-22 months. Although one of our favorite charts – as we think this highlights the reasons for default; not that companies perform poorly but rather because investors decide to no longer fund them – we do wonder if market structure has changed in such a way where the chart has less meaning today. Namely, have maturities been elongated such that fewer CCC companies need financing today or are there other financing opportunities for companies through shadow banking or the loan market that didn't exist in the past?

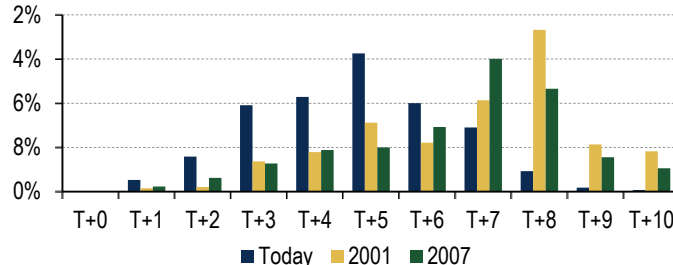
On the maturity schedule of the loan market, [the CCC maturity wall](#) looks significantly worse today than in 2007 and 2001, 2 years preceding a large pickup in default rates. This suggests to us that CCC issuers may want to extend, but have not for some other reason.

**Chart 4: CCC issuer access**



Source: BofA Merrill Lynch Global Research

**Chart 5: The maturity wall for CCCs is worse today than 2001 and 2007**



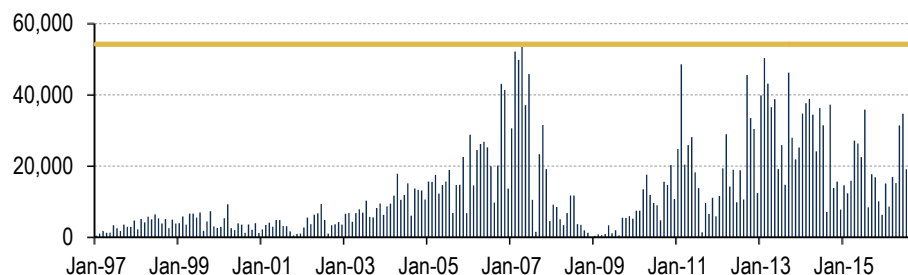
Source: BofA Merrill Lynch Global Research

Perhaps part of the answer is that more CCC issuers are coming to the loan primary market today than in past years. Though our data doesn't allow us to go that far back in history, what we do see is that out of the top 25 CCC bond issuers by par, just 2 have tapped the loan market in the last 1.5 years (Laureate Education and Avaya). Furthermore, only 5 have issued unsecured debt (Kinetic Concepts, Hub International,

Solera Corp, Calumet, and Permian Resources). This leads us to believe that CCC companies with significant unsecured debt have also had trouble issuing in the secured market. We see this potentially causing a problem next year as 9 of the top 17 largest CCC bond issuers have paper that comes current in 2017; a time period where CFOs begin to explore refinancing existing debt. For this reason, we think the trend to lower quality remains confined, for now, in single B bonds and riskier loan paper in issuers without a significant amount of unsecured debt.

And right on cue, a record \$54.23bn in new institutional money finds its way into the US loan market this September, overtaking April 2007's \$53.25bn for the largest ever dollar amount in a single month (Chart 6). And [as we recently wrote](#), the primary Loan market has become significantly more issuer-friendly in recent months; the clearing yields have been decidedly lower since February, and the number of deals that have reverse flexed continues to outweigh those flexed up. In terms of proceeds, the majority of September's issuance was geared towards refis (\$20.66bn, 7<sup>th</sup> most ever) and acquisitions (\$12.24bn, 6<sup>th</sup> most), while there was also a notable reduction in the quality of issuers coming to market; just 31% of September's total issuance was double-B rated, below the 2 year average of 41%. Filling the void was an increase in NR loans, which were responsible for \$4.58bn or 8% of last month's supply. Year to date, loan issuance is currently \$215.58bn, already above 2015's \$214.08bn for the entire year. We think this trend has staying power for the rest of this year, as healthy CLO issuance (over \$5bn priced in September) and the continued reluctance to fund riskier unsecured paper keeps the bid for loans elevated.

**Chart 6: September's \$54.23bn in US loan issuance was the largest ever amount**



Source: BofA Merrill Lynch Global Research, S&P LCD

Despite the record setting issuance for loans, they managed to return 0.81% in September and outperformed the 0.50% gain that high yield experienced. In our opinion, this is indicative of an increased risk aversion to duration and desire to move up the capital structure while adding risk on the margins. Case in point, loans gained roughly \$1.5bn (+1.9%) in net inflows during September, whereas open-ended high yield funds experienced just a \$166mn (+0.0%) net inflow.

We think this outperformance of Loans has the potential to continue this year if our economists' call for a December rate hike from the Fed proves to be correct and investors continue to migrate into a more rate insensitive product. Additionally, as we noted above, with the majority of asset managers trailing their return bogey for 2016 we think they may feel forced into lower rated paper to chase returns into year-end. We therefore would prefer to barbell our portfolio with Loans and selectively chosen single-B/CCC unsecured names. In our opinion, these two pockets of the market will experience the strongest technicals for the remainder of this year and should leave the portfolio well positioned for downside scenarios including a backup in rates or a collapse in fundamentals.

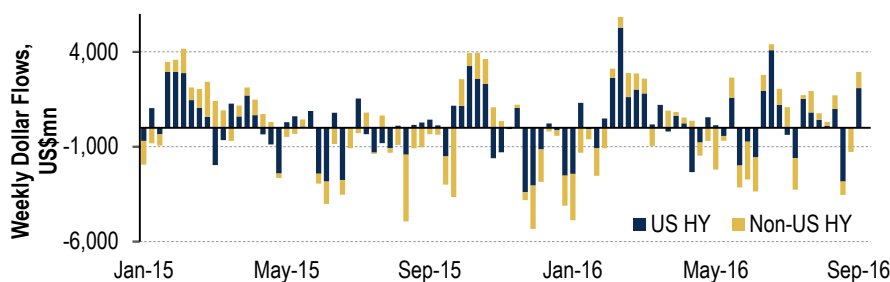


# Flows

This is an excerpt from our recently published report: [The High Yield Flow Report: High yield steals the flow 29 September 2016](#)

US HY recorded a sizable \$2.08bn (+0.9%) net inflow last week after the Fed elected not to raise rates and the BOJ announced their intention to keep the 10yr near its current level of 0%. Most of the inflows (\$1.84bn, +4.7%) came from HY ETFs which tend to be more institutionally driven and react more quickly to macro news, although open-end funds increased their AUM as well with a \$243mn (+0.1%) net inflow. As we previously mentioned, we expected last week's minor \$28mn inflow to continue into the current week as investors continued to buy riskier assets as a source of additional yield. However, given fresh concerns over several bank stocks and the recent selloff as a result, we would not be surprised to see these flows slow or even reverse next week. Although US HY gained the most in %AUM last week, most other risk assets recognized inflows as well. Non-US HY gained \$851mn (+0.3%); EM debt added \$2.41bn (+0.7%); and equities grew by \$3.37bn (+0.07%), their largest inflow in 7 weeks. Loans also increased their AUM by \$557mn (+0.7%), the 9th consecutive inflow for the asset class as money market reforms have caused LIBOR to increase to its highest level since 2009. Money market funds, which have experienced some of their largest outflows since 2010 recently, also recognized an inflow last week to the tune of \$2.04bn (+0.1%). As a whole, fixed income funds gained \$4.94bn (+0.2%).

**Chart 7: Global HY flows distributed between US-domiciled and non US-domiciled funds**



Source: BofA Merrill Lynch Global Research, EPFR Global

## New Issue Roundup

### Bonds

DM HY issuance slowed down this past week to \$3.6bn from \$8.5bn and \$13.1bn from the 2 weeks prior, the smallest amount for any week this month. However, September still managed to conclude with \$39.2bn in aggregate issuance (\$23.8bn from the United States) for the largest dollar amount in 17 months (most in 4 months from the US). Year-to-date issuance stands at \$208.4bn out of DM HY and \$153.1bn from the US, 22% and 16% behind last year's paces respectively. At the current pace, we will conclude 2016 with \$203.89bn in US HY issuance which represents a 6% decline from 2015's \$215.23bn in aggregate.

Of this month's issuance, \$20.64bn was double-B rated, \$11.86bn was single-B, and the remaining \$6.66bn was triple-C. This was the largest dollar amount of triple-C issuance in 2 years and more than the previous 4 months combined. However, in our opinion it is still too early to signal a broad-based increase in risk appetite at the primary level as the percent of CCC issuers accessing the primary market over the last 12 months remains at its lowest level since 2009.

**Table 3: DM issuance summary (\$bn)**

	DM	United States	Europe	BB	B	CCC/NR
WTD Sep 30	3.6	1.7	1.9	0.8	1.6	1.2
Wk Sep 23	8.5	6.9	1.4	5.4	2.1	1.0
Wk Sep 16	13.1	8.0	5.1	6.7	3.8	2.6
Wk Sep 09	13.7	7.3	6.1	7.4	4.3	2.0
MTD Sep	39.2	23.8	14.6	20.6	11.9	6.7
August	21.3	17.9	3.4	9.7	10.6	1.0
July	18.4	13.2	4.7	4.1	13.5	0.5
June	24.8	19.3	2.0	14.3	9.3	1.2
YTD 2016	208.4	153.1	47.8	93.2	93.3	21.5
YTD 2015	267.0	181.2	69.6	94.3	136.2	36.5
2015	308.6	215.8	75.2	117.8	152.2	38.5
2014	376.0	238.8	119.5	129.9	186.8	59.2
2013	378.3	270.3	91.5	128.8	172.4	77.2

Source: BofA Merrill Lynch Global Research

**Table 4: Most recent DM HY bond new issues**

Pricing Dt	Name	Size (\$)	Snr	Cpn	Maturity	Price	Yield	Moody's	S&P	Type	Sector	Region
9/29/2016	Schoeller Allibert Holding BV	235	Sr Sec Nts	8.00	10/1/2021	100.00	8.00	B2	B-	144A for Life	Transportation	Europe
9/29/2016	Virgin Media Inc	454	Sr Nts	5.50	9/15/2024	100.00	5.50		B	144A for Life	Media	Europe
9/29/2016	Jerrold Finco plc	486	Sr Sec Nts	6.25	9/15/2021	100.00	6.25	NR	BB-	144A for Life	Diversified Finan Serv	Europe
9/29/2016	Cabot Financial (Luxembourg) SA	454	Sr Sec Nts	7.50	10/1/2023	100.00	7.50	B2	B+	144A for Life	Diversified Finan Serv	Europe
9/29/2016	Mohegan Tribal Gaming Authority	500	Sr Nts	7.88	10/15/2024	99.27	8.00	B3	CCC+	144A for Life	Entertainment	United States
9/29/2016	Inventiv Group Holdings Inc	675	Sr Nts	7.50	10/1/2024	100.00	7.50	Caa2	CCC+	144A for Life	Diversified Finan Serv	United States
9/29/2016	Crescent Communities LLC	400	Sr Sec Nts	8.88	10/15/2021	100.00	8.88	Caa1	B+	144A for Life	Real Estate	United States
9/27/2016	Beazer Homes USA Inc	100	Sr Nts	8.75	3/15/2022	104.25	Float	B3	B-	144A w/RR	Home Builders	United States
9/26/2016	NH Hoteles SA	321	Sr Sec Nts	3.75	10/1/2023	100.00	3.75	Ba3	BB-	144A w/RR	Lodging	Europe

Source: BofA Merrill Lynch Global Research, Bloomberg, company filings

At the single-name level, 9 different issuers accessed the primary market last week for a combined \$3.62bn in DM HY issuance. The largest pricing came from Inventiv Group Holdings Inc with a \$675mn tranche of CCC rated senior notes. The offer was downsized from \$720mn with the remaining \$45mn in proceeds shifted to its concurrent term loan. The 7.5% yield printed at the tight end of talk in the 7.5% to 7.75% context, with proceeds used to refinance existing debt and fund Advent International's partial acquisition of inventive.

Also coming to market was Mohegan Tribal Gaming Authority with a \$500mn offering of 7 7/8% senior notes. The B3/CCC+ issue priced at 99.271 to yield 8%, at the tight end of talk in the 8% to 8.25% context. The operator of gaming and entertainment enterprises plans to use the proceeds to refinance its entire capital structure.

**Table 5: New issue breakdown by week, last 15 weeks**

	Ratings					Currency (US\$m)				Seniority			Deal Type		
	Total	BB	B	CCC	NR	USD	EUR	GBP	CAD	Secured	Senior	Sub	144a w RR	144a w/o RR	Public
6/24/2016	1,350	1,350				1,350					1,350				1,350
7/1/2016															
7/8/2016	1,250		1,250			1,250					1,250			1,250	
7/15/2016	4,589	900	3,189	500		3,810	779			1,914	2,675		375	3,714	500
7/22/2016	5,821	880	4,941			4,075	1,189	557		3,296	2,525		4,721	1,100	
7/29/2016	6,709	2,275	4,084			5,775	934			700	6,009		1,970	2,614	2,125
8/5/2016	8,734	4,634	3,801	300		7,250	1,484			1,075	7,659		2,650	5,059	1,025
8/12/2016	6,933	4,050	2,808	75		6,665	268			1,523	5,410		1,600	3,033	2,300
8/19/2016	5,620	1,000	4,020	600		5,620				1,170	4,450		850	4,270	500
8/26/2016															
9/2/2016	292	292						292		292			292		
9/9/2016	13,684	7,423	4,275	1,986		9,520	4,164			6,108	7,577		4,966	8,218	500
9/16/2016	13,096	6,709	3,837	2,550		9,350	3,554		192	5,087	8,009		1,331	10,561	1,203
9/23/2016	8,462	5,404	2,108	950		6,550	1,761		152	2,799	5,663		2,800	5,662	
9/30/2016	3,625	807	1,643	1,175		1,675	556	1,394		1,896	1,729		421	3,204	

Source: BofA Merrill Lynch Global Research

## Loans

Although global loan issuance slowed down modestly from its recent pace, it remained heavily active with \$10.8bn priced globally and \$9.4bn out of the United States. Most of last week's US loan activity was concentrated in the double-B bucket (\$4.21bn), while \$2.39bn came from single-B issuers and the remaining \$2.85bn was not rated. As we mentioned above, September concluded with \$54.23bn in new loan issuance which was the most ever for a single month.



Table 6: Global loan issuance over time (\$bn)

	Global	US	BB	B	CCC/NR	Cov lite
WTD Sep 30	10.8	9.4	4.2	3.7	2.9	6.9
Wk Sep 23	14.3	14.3	4.5	8.5	1.3	9.4
Wk Sep 16	15.8	14.4	6.9	7.4	1.4	11.5
Wk Sep 09	17.3	16.1	3.3	13.4	0.6	12.2
MTD Sep	58.1	54.2	18.9	33.0	6.2	40.0
August	21.6	20.2	10.6	7.4	3.6	13.6
July	25.2	19.1	8.9	15.4	1.0	18.9
June	37.0	34.7	10.4	22.0	4.7	26.4
YTD 2016	233.0	215.6	90.4	122.6	20.1	167.2
YTD 2015	206.9	180.8	81.9	108.7	16.3	144.5
2015	257.3	214.1	112.9	126.6	17.7	186.4
2014	377.0	319.2	109.5	216.5	51.1	265.6
2013	454.9	389.8	152.6	261.9	40.4	279.0

Source: S&amp;P LCD

Table 7: New issue breakdown by month, last 3 months

	Total	Ratings					TLB	2nd Lien	Cov Lite
		BB	B	CCC	NR				
6/17/2016	8,295	4,060	3,355	205	675	1719.8	8,090	205	5,500
6/24/2016	3,990	670	1,600				3,990		2,565
7/1/2016	338		193		145		338		143
7/8/2016	1,500	1,100	400				1,500		1,450
7/15/2016	8,603	3,500	5,103		0		8,603		8,328
7/22/2016	5,126	1,200	3,218	490	218		4,636	490	3,943
7/29/2016	10018.63	3050	6645.62	323	0	9695.62	323		5170
8/5/2016	11,197	4,400	5,540	755	502	10,990	205		4,820
8/12/2016	8,941	6,187	1,864		890		8,941		7,321
8/19/2016	1,500			1,500			1,500		1,500
9/2/2016	0		0				0		0
9/9/2016	17,297	3325	13,407	375	190	16,922	375		12,225
9/16/2016	15,763	6,912	7,410	558	883.5	15,065	698		11,517
9/23/2016	14,260	4,490	8,475	640	655	13,410	850		9,390
9/30/2016	10,796	4205	3,741		2850	10,071	725		6,872

Source: S&amp;P LCD

In terms of proceeds, the majority of September's issuance was geared towards refis (\$20.66bn, 7<sup>th</sup> most ever) and acquisitions (\$12.24bn, 6<sup>th</sup> most), while there was also a notable reduction in the quality of issuers coming to market; just 31% of September's total issuance was double-B rated, below the 2 year average of 41%. Filling the void was an increase in NR loans, which were responsible for \$4.58bn or 8% of last month's supply. Year to date, loan issuance is currently \$215.58bn, already above 2015's \$214.08bn for the entire year. At the single name level, one of last week's largest pricings was a \$1.647bn seven-year term loan from Platform Specialty Products Corp. Proceeds from the deal, together with cash, will be used to refinance existing term loans, including the dollar TLB-1 and TLB-2 tranches and the euro TLC-1 tranche.

Table 8: Recent leveraged loan new issues

Launch Dt	Issuer	Deal Name	Size (\$)	New Inst. Money (\$)	Moody's	S&P	Asset Backed	Cov Lite	Proceeds	Sector	Country
9/29/2016	Platform Specialty Products Corp	Platform Specialty (US 10/16)	1647	1647	B2	BB-	No	Yes	Refinancing	Chemicals	United States
9/29/2016	Tweddle Group	Tweddle (10/16)	225	225	NR	NR	No	No	GCP	Printing & Publishing	United States
9/29/2016	Talen Energy Corp	Talen Energy (10/16)	600	600	Baa3	BB	No	Yes	Acquisition	Utilities	United States
9/28/2016	Universal Fiber Systems LLC	Universal Fiber (Add-on 10/16)	44	44	NR	B+	No	No	Dividend	Textile & Apparel	United States
9/28/2016	Pacific Architects and Engineers Inc	PAE (2nd Lien 10/16)	175	175	NR	NR	No	Yes	Dividend	Services & Leasing	United States
9/28/2016	Pacific Architects and Engineers Inc	PAE (TL 10/16)	550	550	NR	NR	No	Yes	Dividend	Services & Leasing	United States
9/28/2016	Emerald Expositions Holdings	Emerald Expo (Add-on 10/16)	200	200	B2	BB-	No	Yes	Refinancing	Services & Leasing	United States
9/28/2016	Hargray Holdings LLC	Hargray (Add-on 10/16)	397	50	B2	B+	No	No	Dividend	Telecom	United States
9/27/2016	Ancestry.com	Ancestry.com (10/16)	1350	1350	NR	NR	No	No	Dividend	Computers & Electronics	United States
9/27/2016	Ancestry.com	Ancestry.com (2nd Lien 10/16)	550	550	NR	NR	No	No	Dividend	Computers & Electronics	United States
9/27/2016	Casella Waste Systems Inc	Casella Waste (TL 10/16)	350	350	B1	B+	No	Yes	Refinancing	Environmental	United States
9/27/2016	CBS Radio	CBS Radio (10/16)	1250	1000	Ba3	BB-	No	No	Acquisition	Radio	United States
9/27/2016	Lions Gate Entertainment Corp	Lions Gate (TL 10/16)	1900	1900	Ba2	BB-	No	Yes	Acquisition	Film	United States
9/27/2016	SRS Distribution	SRS Distribution (Add-on 10/16)	100	100	B2	B	No	Yes	Refinancing	Building Materials	United States
9/26/2016	Royalty Pharma Finance Trust	Royalty Pharma (10/16)	705	705	Baa2	BBB-	No	No	Refinancing	Services & Leasing	United States
9/26/2016	Reynolds Group Holdings Ltd	Reynolds Group (Add-on 10/16)	1350	1350	B2	B+	No	Yes	Refinancing	Forest Product	New Zealand

Source: S&amp;P LCD

## Performance Summary

Performance was strong in the first half of the week as the BOJ and Fed announcements created a bid for risk, though this partially faded in the back half of the week due to increased stress within the banking sector. High yield was the top performing asset class with a +0.59% return from CDX HY and +0.41% from our high yield cash index, while leveraged loans were the 3<sup>rd</sup> top performer (+0.22%). EM equities finished at the bottom of the list with a 1.53% decline, though they remain among 2016's top performers with a +13.77% return YTD.

Performance was mostly driven by risk across corporate rating

Table 9: Total returns across asset classes

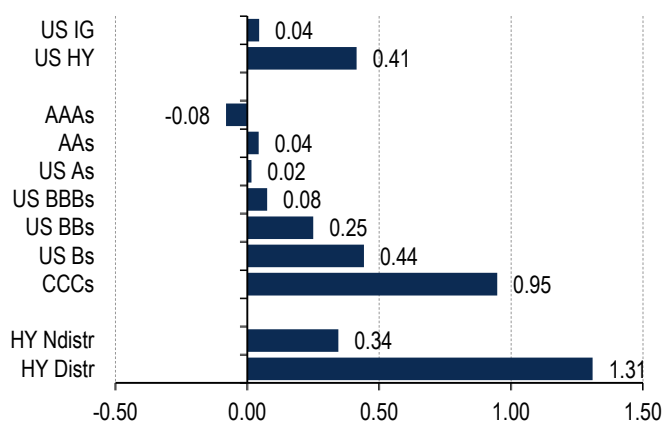
Ticker	Name	WOW (%)	MTD (%)	YTD (%)
MXEF	EM Eqty	-1.53	1.09	13.77
HE00	EU HY	-0.17	-0.49	7.12
EMGB	EM Govts	-0.09	0.31	12.98
EMIB	EM IG	-0.08	-0.30	8.61
GOQI	TIPs	0.01	0.55	7.70
COA0	US IG	0.04	-0.29	9.11
UOA0	Municipals	0.06	-0.48	4.09
MOA0	Mortgages	0.06	0.28	3.72
GA05	5yr TRSY	0.07	0.27	4.00
CDXIG	CDX.IG	0.12	0.30	1.50

buckets. Triple-Cs were the top performer with a +0.95% return, followed by single-Bs (+0.44%) and double-Bs (+0.25%). As a whole, the nondistressed portion of high yield finished with a 0.34% gain, compared to a 1.31% return from distressed credits. All but 1 of our 18 high yield sectors finished with a positive WoW return in the final week of September. Energy (+1.02%) far and away outperformed after OPEC reached an agreement to cap oil production for the first time in 8 years, while Materials (+0.61%) and Utilities (+0.58%) also delivered strong gains. Food (-0.20%) was the lone sector with a negative return last week.

SPX	S&P 500	0.17	-0.12	6.08
EMHB	EM HY	0.18	1.13	16.69
LCDI/ALL	Lev Loans	0.22	0.86	7.72
H0A0	US HY	0.41	0.65	15.32
CDXHY	CDX.HY	0.59	1.13	8.40

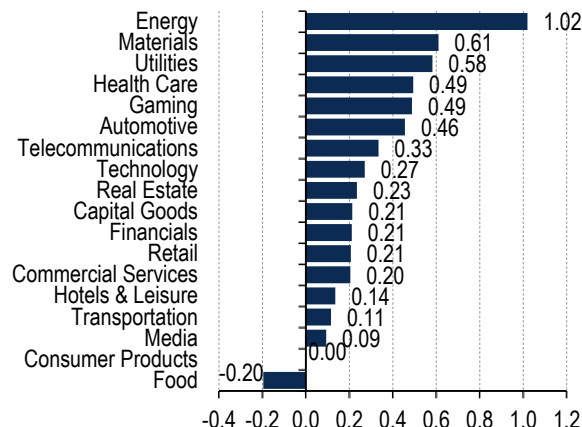
Source: BofA Merrill Lynch Global Research

**Chart 8: Segment and rating returns, week-on-week (WoW)**



Source: BofA Merrill Lynch Global Research

**Chart 9: Sector returns, week-on-week (WoW)**



Source: BofA Merrill Lynch Global Research

## Top performers

Last week's top performing bond was the IHRT 10, which jumped 9.7% after the company proposed an amendment to its outstanding senior notes due 2021 to increase the aggregate principal by \$500mn. However, the company's 9% issue due 2019 was one of last week's bottom performers in response to the news with a 2.4% decline. Taking spots 2-4 on the list of last week's top performers were 3 series of TCKBCN notes, which each gained between 6 and 7% after the company announced it intends to reduce debt by \$1.5 to \$2bn and improve its leverage to 2.5x at a leveraged finance conference. Other top performers include the VNR 7 7/8's (+5.8%), the SVR 9 1/8's (+5.4%), and the TCKBCN 6's (+5.3%).

**Table 10: Top 10 performers, September 22<sup>nd</sup> – September 29<sup>th</sup>**

Issue	Rating	Price	Yield	ZSpread	Px Chg	Pct Chg	Volume
IHRT 10 '18	CC	65.94	48.60	4745	5.8	9.7	38
TCKBCN 6.25 '41	B3	95.40	6.63	502	6.1	6.9	49
TCKBCN 5.4 '43	B3	86.66	6.46	483	5.4	6.7	45
TCKBCN 6.13 '35	B3	93.91	6.70	512	5.2	5.9	21
VNR 7.88 '20	CC	48.19	34.56	3349	2.6	5.8	37
SVR 9.13 '19	CCC2	76.00	23.23	2219	3.9	5.4	5
TCKBCN 6 '40	B3	91.74	6.70	509	4.6	5.3	34
CLD 8.5 '19	B3	80.70	16.49	1543	3.9	5.1	27
CHK 6.13 '21	CCC3	91.56	8.48	733	3.9	4.5	20
DNR 5.5 '22	CCC2	71.63	12.76	1158	2.8	4.1	18

Source: BofA Merrill Lynch Global Research, Bloomberg. Performance and volume data from FINRA TRACE.

## Bottom performers

The BRS 6 ¼'s were last week's bottom performer with a 3.7% decline after the company disclosed an amended and restated revolving credit facility and term loan agreement related to the Change in Control provision. Also making their way into last week's list of bottom performers were 5 different series of FTR notes, which each fell roughly 1.5% to 2% due to their liquidity and generic use as a market hedge. Other bottom performers include the HOS 5 7/8's (-2.6%), the IHRT 9's (-2.4%), and the FGP 8 5/8's (-1.9%).

**Table 11: Bottom 10 performers, September 22<sup>nd</sup> – September 29<sup>th</sup>**

Issue	Rating	Price	Yield	ZSpread	Px Chg	Pct Chg	Volume
BRS 6.25 '22	B1	72.34	13.01	1179	-2.8	-3.7	15
HOS 5.88 '20	CCC1	61.79	22.16	2107	-1.6	-2.6	14
FTR 6.88 '25	BB3	88.79	8.81	748	-2.2	-2.5	24
IHRT 9 '19	CCC2	79.34	17.72	1664	-2.0	-2.4	45
FTR 10.5 '22	BB3	106.17	9.09	793	-2.4	-2.2	165
FTR 11 '25	BB3	104.32	10.24	892	-2.3	-2.1	201
FGP 8.63 '20	B3	98.17	9.21	813	-1.9	-1.9	10
FTR 9 '31	BB3	92.61	9.96	848	-1.8	-1.9	21
FTR 8.75 '22	BB3	102.48	8.18	699	-1.5	-1.4	13
FTR 7.63 '24	BB3	93.53	8.82	754	-1.3	-1.4	23

Source: BofA Merrill Lynch Global Research, Bloomberg. Performance and volume data from FINRA TRACE.

## Rating Actions

Last week we saw 15 downgrades and 14 upgrades on high yield issuers, including 1 rising star and 1 selective default. Notably, Lear Corp was upgraded to Baa3 from Ba1 by Moody's, reflecting the company's improved profit margins through ongoing cost reductions. The rating agency believes that Lear has sufficient flexibility in its operating costs, and with its low financial leverage the company should be able to manage through a reasonable down cycle to remain profitable.

Also of note, Cloud Peak Energy Resources LLC was lowered to SD by S&P after the company announced an exchange offer of its \$300mn senior unsecured notes due 2019 and its \$200mn senior unsecured notes due 2024. The rating agency views this transaction as distressed because the cash and principal amount of the new securities offered is less than the original par amount. Additionally, according to S&P the deterioration in the company's operating performance and reduced liquidity over the past several quarters offers uncertainty over the company's ability to generate positive operating cash flow in the near future.

On downgrades, Freeport-McMoran had its LT local issuer credit rating lowered to BB- from BB by S&P because of continued lower copper and oil and gas prices, which contributed to adjusted leverage above 6x for the company in Q2 2016. However, S&P anticipates a stronger financial risk profile by year end due to the company's ongoing efforts to reduce debt.

**Table 12: Ratings actions on high yield issuers, September 22<sup>nd</sup> – September 29<sup>th</sup>**

Date	Action	Company Name	Rating Type	Agency	Curr Rtg	Last Rtg
09/29/2016	Upgrade	Chesapeake Energy Corp	LT Local Issuer Credit	S&P	CCC+	SD
09/29/2016	Upgrade	CRGT Inc	LT Local Issuer Credit	S&P	B	B-
09/28/2016	Upgrade	Radian Group Inc	LT Local Issuer Credit	S&P	BB	BB-
09/27/2016	Upgrade	Alliance One International Inc	LT Local Issuer Credit	S&P	CCC+	CCC
09/27/2016	Upgrade	Pactiv LLC	LT Local Issuer Credit	S&P	B+	B
09/27/2016	Upgrade	Simmons Foods Inc	LT Local Issuer Credit	S&P	B	B-
09/26/2016	Upgrade	Pike Corp	LT Local Issuer Credit	S&P	B+	B
09/23/2016	Upgrade	Memorial Resource Development LLC	LT Local Issuer Credit	S&P	BB+	B *+
09/23/2016	Upgrade	Range Resources-Louisiana Inc	LT Local Issuer Credit	S&P	BB+	B *+
09/28/2016	Upgrade	Alliance One International Inc	Senior Secured Debt	Moody's	B1	Caa3
09/28/2016	Upgrade	JC Penney Corp Inc	Senior Secured Debt	Moody's	Ba2	B1
09/28/2016	Upgrade	JC Penney Corp Inc	Senior Unsecured Debt	Moody's	B3	Caa2
09/26/2016	Upgrade	Tenaska Alabama Partners LP	Senior Secured Debt	Moody's	Ba1	Ba2
09/22/2016	Upgrade	Lear Corp	Senior Unsecured Debt	Moody's	Baa3	Ba1
09/28/2016	Initiated	CBS Radio Inc	LT Local Issuer Credit	S&P	B+	
09/28/2016	Initiated	PAE Holding Corp	LT Local Issuer Credit	S&P	B	
09/22/2016	Initiated	Chobani Global Holdings Inc	LT Local Issuer Credit	S&P	B	
09/22/2016	Initiated	Chobani LLC	LT Local Issuer Credit	S&P	B	
09/27/2016	Initiated	St Marys Cement Inc	Senior Unsecured Debt	Moody's	Ba2	
09/27/2016	Dropped	Mattress Firm Holding Corp	LT Local Issuer Credit	S&P	NR	B+ *+
09/26/2016	Dropped	Allison Transmission Inc	LT Local Issuer Credit	S&P	NR	BB
09/26/2016	Dropped	American Media Inc	LT Local Issuer Credit	S&P	NR	CCC
09/26/2016	Dropped	Memorial Resource Development LLC	LT Local Issuer Credit	S&P	NR	BB+
09/26/2016	Dropped	Range Resources-Louisiana Inc	LT Local Issuer Credit	S&P	NR	BB+
09/29/2016	Downgrade	ACE Cash Express Inc	LT Local Issuer Credit	S&P	CC *-	B-
09/29/2016	Downgrade	Compass Minerals International Inc	LT Local Issuer Credit	S&P	BB	BB+

**Table 12: Ratings actions on high yield issuers, September 22<sup>nd</sup> – September 29<sup>th</sup>**

Date	Action	Company Name	Rating Type	Agency	Curr Rtg	Last Rtg
09/29/2016	Downgrade	Emmis Communications Corp	LT Local Issuer Credit	S&P	CCC	B-
09/29/2016	Downgrade	Steinway Musical Instruments Inc	LT Local Issuer Credit	S&P	B-	B
09/28/2016	Downgrade	Cyprus Amax Minerals Co	LT Local Issuer Credit	S&P	BB-	BB
09/28/2016	Downgrade	ECI Holdco Inc	LT Local Issuer Credit	S&P	B	B+
09/28/2016	Downgrade	Freeport-McMoRan Corp	LT Local Issuer Credit	S&P	BB-	BB
09/27/2016	Downgrade	Legacy Reserves LP	LT Local Issuer Credit	S&P	CCC	B-
09/23/2016	Downgrade	Lions Gate Entertainment Corp	LT Local Issuer Credit	S&P	B+	BB- *
09/23/2016	Downgrade	Pinnacle Operating Corp	LT Local Issuer Credit	S&P	CCC	CCC+
09/23/2016	Downgrade	Sonic Automotive Inc	LT Local Issuer Credit	S&P	BB-	BB
09/22/2016	Downgrade	Sequa Corp	LT Local Issuer Credit	S&P	CCC	CCC+
09/28/2016	Downgrade	Compass Minerals International Inc	Senior Unsecured Debt	Moody's	B1	Ba2 *
09/26/2016	Downgrade	Bristow Group Inc	Senior Unsecured Debt	Moody's	B2	B1
09/24/2016	Downgrade	Pinnacle Operating Corp	Senior Secured Debt	Moody's	Caa3	Caa2
09/23/2016	Default (selective)	Cloud Peak Energy Resources LLC	LT Local Issuer Credit	S&P	SD	B+

Source: Bloomberg, S&P, Moody's. Rising stars and fallen angels bolded.

## Relative Value

### Cash v. CDS

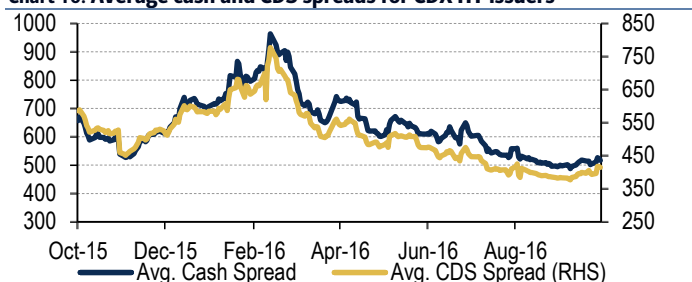
Within our HG universe cash and synthetic indices performed similarly with 2bps of widening each. However, in HY cash outperformed with no change in spread, compared to 6bps of widening for CDX HY (Table 13). On an issuer matched level, the average HY basis increased by 2bps i.e. CDS spreads lagged cash performance (Chart 11). The average basis for CDX HY issuers we track now stands at -102bps, 7bps less negative since the roll into S27 last Tuesday.

**Table 13: CDX vs. ML Cash Indices**

Index	Spread	1W-Chng	1M-Chng	3M-Chng
CDX IG	78	2	1	-5
HG Cash	143	2	5	-19
CDX HY	415	6	1	-35
HY Cash	509	0	-1	-117

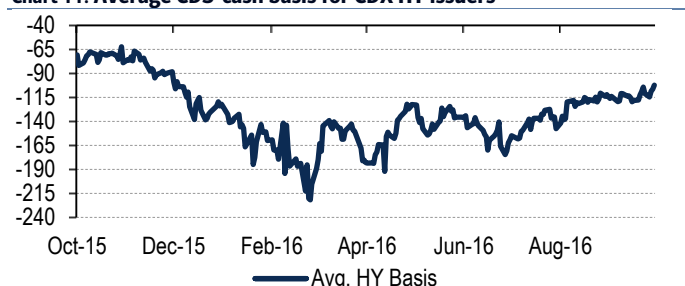
Source: BofAML Global Research, 5y spreads for CDX, OAS for cash

**Chart 10: Average cash and CDS spreads for CDX HY issuers**



Source: BofA Merrill Lynch Global Research, Average spreads for a selection of issuers in the On The Run CDX HY index. Currently includes 82 HY20 constituents.

**Chart 11: Average CDS-cash basis for CDX HY issuers**



Source: BofA Merrill Lynch Global Research, Average basis for a selection of issuers in the On The Run CDX HY index. Currently includes 82 HY20 constituents.

### CDS Indices

CDS indices in the US and Europe widened over the week (Table 14). For the most part, single-names outperformed indexes as skews increased in CDX IG, CDX HY, and iTraxx XO, although single names lagged in iTraxx Main with a 1bp decline in its skew. The HY/IG spread ratio has fallen 5bps since the HY roll and currently stands at 529bps. Meanwhile, the XO-HY spread differential fell 5bps and currently stands at -82bps as European HY outperformed its US counterpart.

**Table 14: CDS Indices – spread, intrinsic and skew**

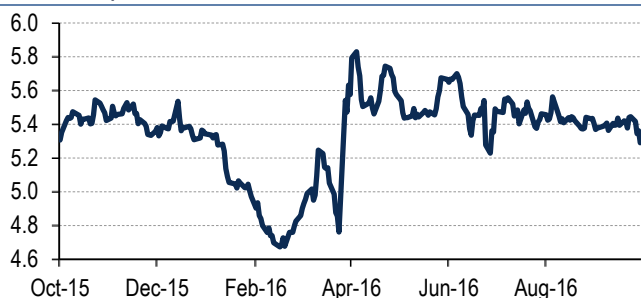
Index	5y Spread	1W-Chng	1M-Chng	3M-Chng	5y Intrinsic	1W-Chng	1M-Chng	3M-Chng	Skew	1W-Chng	1M-Chng	3M-Chng
CDX IG	78	2	1	-5	82	-1	-2	-15	-4	3	3	10
CDX HY	415	6	1	-35	400	-7	-7	-77	15	13	8	42
iTraxx Main	73	3	-1	-13	76	3	0	-15	-3	-1	-1	2
iTraxx XO	333	5	11	-30	334	2	7	-55	-2	3	3	25

Source: BofA Merrill Lynch Global Research

**Table 14: CDS Indices – spread, intrinsic and skew**

Index	5y Spread	1W-Chng	1M-Chng	3M-Chng	5y Intrinsic	1W-Chng	1M-Chng	3M-Chng	Skew	1W-Chng	1M-Chng	3M-Chng
-------	-----------	---------	---------	---------	--------------	---------	---------	---------	------	---------	---------	---------

**Chart 12: HY/IG**



Source: BofA Merrill Lynch Global Research

**Chart 13: XO-HY**

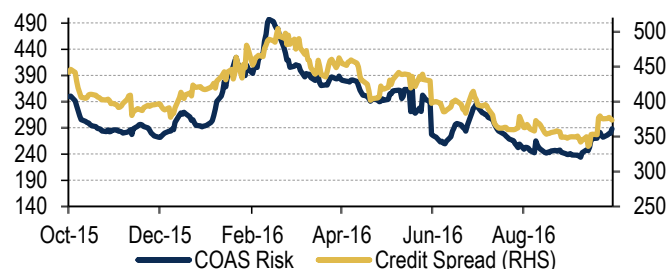


Source: BofA Merrill Lynch Global Research

## Credit v. Equities

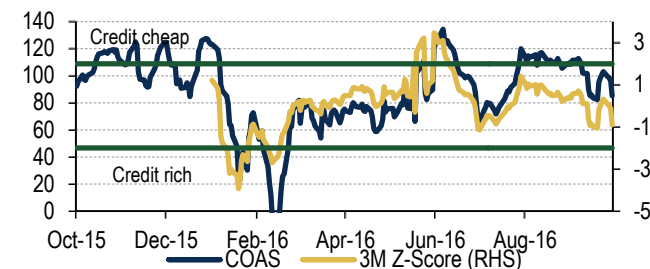
The average credit spread for our HY universe tightened by 3bps compared to a 13bp increase in the equity implied credit risk (Chart 14). The US HY COAS value accordingly fell by 16bps and its 3m z-score is now at -0.90, indicating that credit looks somewhat rich relative to its equity implied risk (Chart 15).

**Chart 14: US HY COAS Risk vs. Spread**



Source: BofA Merrill Lynch Global Research

**Chart 15: US HY COAS & Z-Score**



Source: BofA Merrill Lynch Global Research

## Analyst Certification

### COAS Certification

To the extent that any of the views expressed in this report have been produced as a result of the application of the Credit OAS quantitative proprietary model, the BofA Merrill Lynch Global Research Lighthouse Portfolio group certifies that (1) the views expressed in this report accurately reflect the Credit OAS quantitative model as to the securities and companies mentioned in the report and (2) no part of the firm's compensation from any company mentioned in this report was, is or will be, directly or indirectly, related to the views or results produced by the Credit OAS quantitative model. The projections or other information generated by Credit Option Adjusted Spread (COAS) and Lighthouse regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results. Results generated by COAS and Lighthouse vary with each use and over time. For a description of the Credit OAS proprietary credit evaluation model, including the data input into the model, please see [Introduction to Lighthouse: Credit Option Adjusted Spread, Portfolio Analytics and Data Analysis](#), dated 07 January 2014.



# Disclosures

## Important Disclosures

BofA Merrill Lynch Research Personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

BofA Merrill Lynch Global Credit Research analysts regularly interact with sales and trading desk personnel in connection with their research, including to ascertain pricing and liquidity in the fixed income markets.

## Other Important Disclosures

Prices are indicative and for information purposes only. Except as otherwise stated in the report, for the purpose of any recommendation in relation to: (i) an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report; or (ii) a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including Bank of America Merrill Lynch trading desks.

The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

This report may refer to fixed income securities that may not be offered or sold in one or more states or jurisdictions. Readers of this report are advised that any discussion, recommendation or other mention of such securities is not a solicitation or offer to transact in such securities. Investors should contact their BofA Merrill Lynch representative or Merrill Lynch Financial Global Wealth Management financial advisor for information relating to fixed income securities.

Rule 144A securities may be offered or sold only to persons in the U.S. who are Qualified Institutional Buyers within the meaning of Rule 144A under the Securities Act of 1933, as amended. SECURITIES DISCUSSED HEREIN MAY BE RATED BELOW INVESTMENT GRADE AND SHOULD THEREFORE ONLY BE CONSIDERED FOR INCLUSION IN ACCOUNTS QUALIFIED FOR SPECULATIVE INVESTMENT.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.

The securities discussed in this report may be traded over-the-counter. Retail sales and/or distribution of this report may be made only in states where these securities are exempt from registration or have been qualified for sale.

Officers of MLPF&S or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.

This report, and the securities discussed herein, may not be eligible for distribution or sale in all countries or to certain categories of investors.

### Information relating to Affiliates of MLPF&S and Distribution of Affiliate Research Reports:

**BofA Merrill Lynch includes Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") and its affiliates. Investors should contact their BofA Merrill Lynch representative or Merrill Lynch Global Wealth Management financial advisor if they have questions concerning this report. 'BofA Merrill Lynch' and 'Merrill Lynch' are each global brands for BofA Merrill Lynch Global Research.**

MLPF&S distributes, or may in the future distribute, research reports of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by The Financial Service Board; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSF); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Investment Industry Regulatory Organization of Canada; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; Merrill Lynch (Japan): Merrill Lynch Japan Securities Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International Incorporated (Seoul Branch) regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; DSP Merrill Lynch (India): DSP Merrill Lynch Limited, regulated by the Securities and Exchange Board of India; PT Merrill Lynch (Indonesia): PT Merrill Lynch Indonesia, regulated by Otoritas Jasa Keuangan (OJK); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (Russia): OOO Merrill Lynch Securities, Moscow, regulated by the Central Bank of the Russian Federation; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Spain): Merrill Lynch Capital Markets Espana, S.A.S.V., regulated by Comisión Nacional del Mercado de Valores; Merrill Lynch (Brazil): Bank of America Merrill Lynch Banco Multiplo S.A., regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company, Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.

This research report: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK) and Bank of America Merrill Lynch International Limited, which are authorized by the PRA and regulated by the FCA and the PRA, and is distributed in the UK to retail clients (as defined in the rules of the FCA and the PRA) by Merrill Lynch International Bank Limited, London Branch, which is authorized by the Central Bank of Ireland and subject to limited regulation by the FCA and PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been considered and distributed in Japan by Merrill Lynch (Japan), a registered securities dealer under the Financial Instruments and Exchange Act in Japan; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSF (research reports containing any information in relation to, or advice on, futures contracts are not intended for issuance or distribution in Hong Kong and are not directed to, or intended for issuance or distribution to, or use by, any person in Hong Kong); is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by DSP Merrill Lynch (India); and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch International Bank Limited (Merchant Bank) (MLIBLMB) and Merrill Lynch (Singapore) (Company Registration Nos F 06872E and 198602883D respectively). MLIBLMB and Merrill Lynch (Singapore) are regulated by MAS. Bank of America N.A., Australian Branch (ARBN 064 874 531), AFS License 412901 (BANA Australia) and Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distribute this report in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of BANA Australia, neither MLEA nor any of its affiliates involved in preparing this research report is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this report in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Research reports prepared and issued by Merrill Lynch (DIFC) are done so in accordance with the requirements of the DFSA conduct of business rules. Bank of America Merrill Lynch International Limited, Frankfurt Branch (BAMLI Frankfurt) distributes this report in Germany and is regulated by BaFin.

This research report has been prepared and issued by MLPF&S and/or one or more of its non-US affiliates. MLPF&S is the distributor of this research report in the US and accepts full responsibility for research reports of its non-US affiliates distributed to MLPF&S clients in the US. Any US person receiving this research report and wishing to effect any transaction in any security discussed in the report should do so through MLPF&S and not such foreign affiliates.

### General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Merrill Lynch.

This research report provides general information only. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This report is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of any specific person. Investors should seek



financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this report and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this report.

Securities and other financial instruments discussed in this report, or recommended, offered or sold by Merrill Lynch, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

BofA Merrill Lynch is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

This report may contain a trading idea or recommendation which highlights a specific identified near-term catalyst or event impacting a security, issuer, industry sector or the market generally that presents a transaction opportunity, but does not have any impact on the analyst's particular "Overweight" or "Underweight" rating (which is based on a three month trade horizon). Trading ideas and recommendations may differ directionally from the analyst's rating on a security or issuer because they reflect the impact of a near-term catalyst or event.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned in this report. Investors in such securities and instruments effectively assume currency risk.

UK Readers: The protections provided by the U.K. regulatory regime, including the Financial Services Scheme, do not apply in general to business coordinated by BofA Merrill Lynch entities located outside of the United Kingdom. BofA Merrill Lynch Global Research policies relating to conflicts of interest are described at <http://go.bofa.com/coi>.

MLPF&S or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. MLPF&S or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Merrill Lynch, through business units other than BofA Merrill Lynch Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented in this report. Such ideas or recommendations reflect the different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Merrill Lynch is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this report.

In the event that the recipient received this report pursuant to a contract between the recipient and MLPF&S for the provision of research services for a separate fee, and in connection therewith MLPF&S may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom MLPF&S has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by MLPF&S). MLPF&S is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities mentioned in this report.

#### **Copyright, User Agreement and other general information related to this report:**

Copyright 2016 Bank of America Corporation. All rights reserved. This research report is prepared for the use of BofA Merrill Lynch clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Merrill Lynch. BofA Merrill Lynch Global Research reports are distributed simultaneously to internal and client websites and other portals by BofA Merrill Lynch and are not publicly-available materials. Any unauthorized use or disclosure is prohibited. Receipt and review of this research report constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained in this report (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Merrill Lynch.

Materials prepared by BofA Merrill Lynch Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Merrill Lynch, including investment banking personnel. BofA Merrill Lynch has established information barriers between BofA Merrill Lynch Global Research and certain business groups. As a result, BofA Merrill Lynch does not disclose certain client relationships with, or compensation received from, such issuers in research reports. To the extent this report discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this report. BofA Merrill Lynch Global Research personnel's knowledge of legal proceedings in which any BofA Merrill Lynch entity and/or its directors, officers and employees may be plaintiffs, issuers mentioned in this report is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Merrill Lynch in connection with the legal proceedings or matters relevant to such proceedings.

This report has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of MLPF&S, any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Merrill Lynch Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Merrill Lynch and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This report may contain links to third-party websites. BofA Merrill Lynch is not responsible for the content of any third-party website or any linked content contained in a third party website. Content contained on such third-party websites is not part of this report and is not incorporated by reference into this report. The inclusion of a link in this report does not imply any endorsement by or any affiliation with BofA Merrill Lynch. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Merrill Lynch is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of the report and are subject to change without notice. Prices also are subject to change without notice. BofA Merrill Lynch is under no obligation to update this report and BofA Merrill Lynch's ability to publish research on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Merrill Lynch will not update any fact, circumstance or opinion contained in this report.

Certain outstanding reports may contain discussions and/or investment opinions relating to securities, financial instruments and/or issuers that are no longer current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with MLPF&S or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Merrill Lynch nor any officer or employee of BofA Merrill Lynch accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this report or its contents.