



19 October 2015

## All credit cycles come to an end. This one's no different.

We've said for a while now that the benefits of low rates have long been sapped from the market, and we are in no rush to change our tune on the back of a two week rally. As we look at the fundamentals of the market, our strategic view on high yield remains crystal clear: the market is in its 7<sup>th</sup> or 8<sup>th</sup> inning and still needs to cheapen substantially before valuations become attractive. With the risk for 100s of billions of investment grade downgrades, our view that defaults will soon be increasing, and that Fed stimulus is no longer a tailwind to the market, our expectations are for wider spreads in 2016. This is not to say we expect a massive default wave next year, but do wonder whether the lack of liquidity and general direction of the market creates an attractive entry point anytime soon.

## Spread compensation not enough for what matters: Returns

As we have been traveling across the US and Europe the last 6 weeks we have heard two arguments why investors may find value in high yield. First, there is a lack of alternatives. Second, with the recent widening, spread compensates you for the default expectations priced into the market. We don't agree with either. Investors need to demand return, not yield. A 7% coupon does not yield a 7% return and with the potential for low average returns for some time, we think alternatives do in fact exist. Additionally, traditional measures of spread compensation are flawed in our view, and need to be seen in the context of alternatives and default risk over the life of a portfolio.

## Flows:

High yield ETFs had a second strong week of inflows with a net increase in AUM of \$792mn (+2.3%). HY non-ETFs saw a more benign \$357mn (+0.2%) inflow, resulting in an aggregate \$1.15bn (+0.6%) net inflow for high yield. MTD, HY ETFs have added 9.75% AUM, driven by strong equity performance where the S&P 500 has returned 3.95% MTD.

## Issuance:

DM high yield issuance was light this week with just \$400mn coming to market from 1 deal. The single pricing came from Scotts Miracle-Gro in a \$400mn issuance priced at par to yield 6%. There was only one issuance last week as well, coming from Stonegate Pub Co Financing in an £80mn offering (\$122mn).

## Performance:

Overall performance was positive last week with risk outperforming quality. The top performing class was EM equity which posted 3.09% WoW return, followed by US HY (+1.36%) and CDX HY (+1.27%). US IG added 0.26% and leveraged loans tacked on 0.14%. The only asset classes to post negative WoW returns were TIPs (-0.27%), 5yr treasuries (-0.13%), and mortgages (-0.03%).

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# The View From Above

## All credit cycles come to an end. This one's no different.

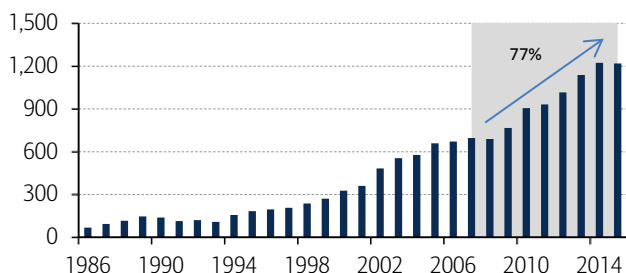
Over the last couple of years, the market has frequently been fooled by assuming a new old world where bad news is bad news and good news is good news, only to be whipsawed by risk on sentiment where fundamentals matter less than easy monetary policy. At the risk of being fooled again, we say the tide has turned, and low rates and pushed out hike expectations matter less in a world where sentiment has shifted, fundamentals are poor, and investors are not being compensated for default and liquidity risk.

It is interesting how so few disagree with us that fundamental metrics in HY are quite poor and unlikely to take a turn for the better any time soon and yet so few agree with our thesis that this is highly problematic. The effectiveness of central bank policy in boosting asset prices over the last few years has created a blind spot when it comes to fundamentals. This is apparent when the only counter to our argument is “where else will the money go?”

The steadfast belief that low rates and the central bank put will continue to mean a reach for yield, never mind it's quality, seems absurd and contrary to evidence. It's been six years since the recession; we've had numerous rate cuts and quantitative easing programs the world over, we've seen all-time high stock prices and we've witnessed all-time low bond yields, and yet neither the market, nor it seems the economy is allowing the Fed to hike rates. As [Thanos wrote recently](#), we should have known something was wrong when bad news was greeted more cheerfully than good news.

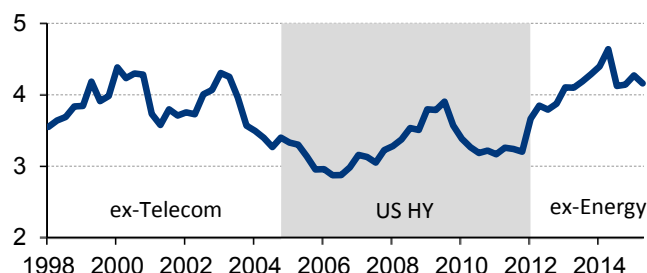
Ok, so what has changed now you say; if central banks continue to remain so accommodative, why not more of the same? Because the last six years have also borne witness to the fastest growth in corporate debt that we've ever seen and re-leveraging to a scale comparable to the worst moments in HY's history.

**Chart 1: Growth of the HY market (USD billion)**



Source: BofA Merrill Lynch Global Research

**Chart 2: HY leverage, even ex-energy, is near all-time highs**



Source: BofA Merrill Lynch Global Research

This has occurred in conjunction with mediocre revenue growth, disappointing capex spending and earnings burnished by buybacks and acquisitions. And just as credit quality started a turn for the worse, risk aversion has set in quite firmly within the market. The flight from Energy and the reluctance to step back in even at today's highly distressed levels amongst investors has been stark, as they anticipate many HY E&Ps to raise priority debt ahead of existing bondholders and [potentially file for bankruptcy](#). Even the erstwhile “safer” places to hide may not make the cut going forward. We have already seen some unraveling in the traditionally defensive pharma market with stock and bond prices of drug makers taking sizable hits on the prospects of drug price caps. Lately, the risk aversion has spread to mainstream hospitals too- case in point HCA equity down 23% since August 4th.

In the same vein BBs, which have outperformed Bs and CCCs all year (BBs -0.93%, Bs -2.67%, CCC -7.14% YTD), face headwinds from falling angels once rating agencies begin downgrades ahead of the default cycle. In the past two migration cycles, an average of 10% of the starting IG universe was downgraded to HY over the course of the cycle

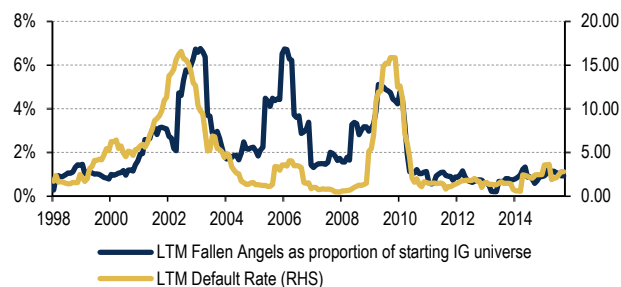
(Chart 3). This translates to as much as \$300bn worth of par value in cumulative downgrades over the next 3 years if the rating agencies begin to shift their expectations in 2016. Should history repeat itself, these downgrades will expand the current BB universe by a whopping 63% and the overall size of the high yield index by nearly 25%. Of course, existing BBs today will also suffer attrition by way of downgrades to Bs, and Bs to CCCs, but the overall indigestion to the market could prove massive. We hear so much about the potential for outflows, but very little about the potential for new paper through downgrades. The latter dwarfs the former.

**Chart 3: 3yr cumulative fallen angel volume, % of starting IG universe**



Source: BofA Merrill Lynch Global Research

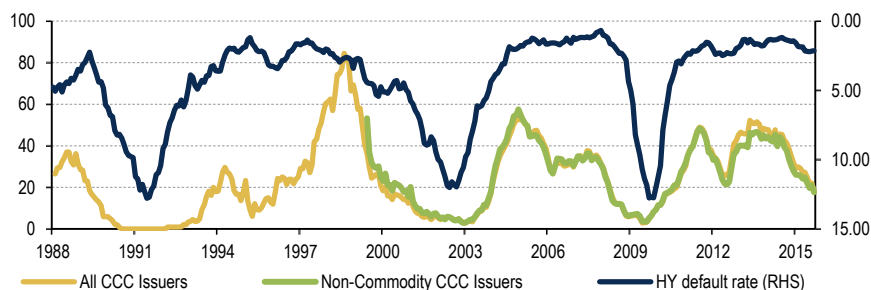
**Chart 4: LTM fallen angel volume, % of starting universe**



Source: BofA Merrill Lynch Global Research

Finally, the re-pricing in the primary market as issuers bow to investor demands is just another reminder of waning risk appetite. Never before has access for CCC issuers, even non-commodity ones, been so poor post crisis. The proportion of low quality issuers accessing the market on an annual basis has now dipped below 20%, a far cry from the 50% at the top of the cycle. It doesn't take much to see what this means for the survivability of low quality issuers going forward. In fact the previous times we were at these levels and heading in the wrong direction was in 1989, 1999, and 2008, right at the heels of default waves (Chart 5). Of particular interest is that once CCC issuance (as a percentage of all existing triple C issuers) falls below 20%, the default rate tends to spike north of 10% within a year and a half on average. In the late 1980s/early 1990s, the time to double digit defaults was 20 months, in the late 1990s/early 2000s it was 22 months and in 2008 and 2009, it was just 14 months. Assuming a similar pattern today, one would expect the current risk aversion to lead to a significant pickup in defaults sometime in mid-late 2017, consistent with our [previously published estimates](#).

**Chart 5: Proportion of CCC issuers accessing the primary market, as a % of existing CCC issuers**



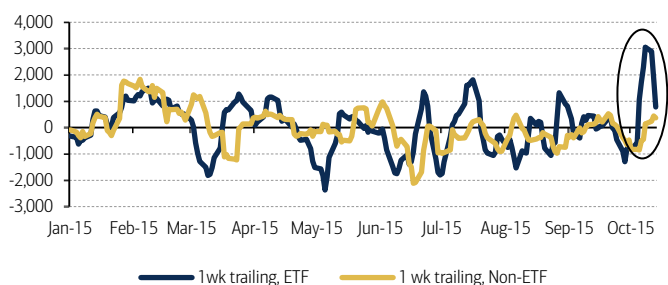
Source: BofA Merrill Lynch Global Research

The idea that once again bad news is good news and good news is bad news has no merit in our view, especially in the context of all the late stage indicators we are seeing. We've said for a while now that the benefits of low rates have long been sapped from the market, and are in no rush to change our tune on the back of a two week rally. In fact, we would argue that we have witnessed nothing but a dead-cat-bounce in HY, and a price action which has little if anything to do with the expectation for rates or improved fundamentals, and everything to do with ETF buying and short covering. The \$2bn+ that flowed into ETFs in the week ended Oct 9<sup>th</sup> was the highest on record for HY ETFs (Chart 6). This was the same period over which the HY index staged a dramatic

70bps of spread tightening, but has since given back some gains. In contrast, actively managed retail funds saw a meagre inflow of \$140mn over the same period.

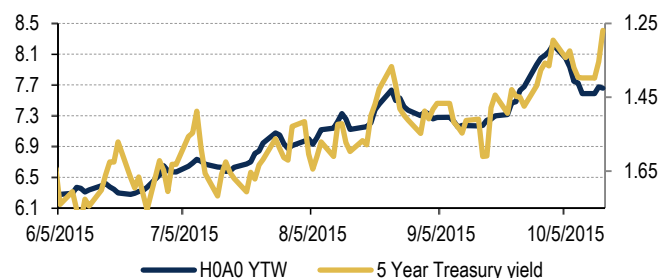
Note that the market was pricing an impossibly low probability for a hike before September's meeting and that the market sold off all summer despite treasury yields falling. In fact, after Yellen's press conference, where she discussed the lack of inflation and weak global growth as the main reasons for keeping zero interest rate policy, the market sold-off. Yet, we are meant to believe that when the same concerns were expressed in the minutes, everyone had changed their mind that these issues were now a good thing? We don't buy it.

**Chart 6: 1 week trailing flows, ETFs vs ex-ETFs**



Source: BofA Merrill Lynch Global Research, EPFR

**Chart 7: HY sold off with lower rates and a worried Fed- the rally is not about rate expectations**



Source: BofA Merrill Lynch Global Research, Bloomberg

As hard as it is to accept that this glorious run for credit has come to an end, in our view it is time to acknowledge that valuations do not justify the risk-reward profile in HY, and no amount of QE or easy monetary policy is likely to change the story for an extended period of time. The market is in its 7<sup>th</sup> or 8<sup>th</sup> inning and without a substantial increase in earnings- a prospect that will require fiscal policy changes more than monetary stimulus, in our opinion- we think high yield will have a difficult time sustaining rallies. And to substantiate that view, we attempt to counter the most frequent arguments we've heard from those who disagree.

## Spread compensation not enough for what matters: Returns

### Yield does not equal return

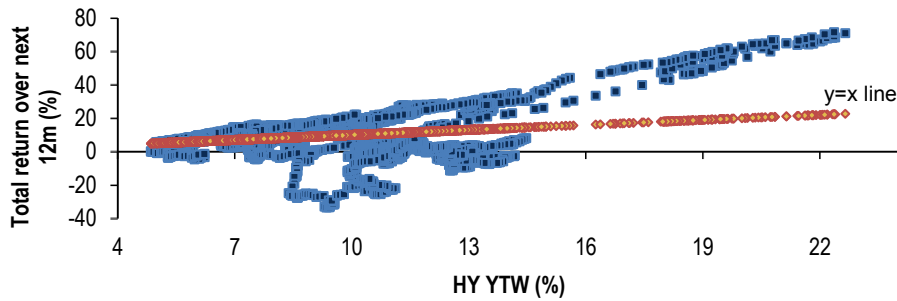
This may be stating the obvious. But we find it necessary to say so anyway. The most vociferous argument for HY seems to rest on the fact that it indeed provides a high yield; more importantly a higher yield than Treasuries, high grade and perhaps even expected stock returns. But what good is a high coupon if enough price loss and defaults occur to wipe away any cash inflow? We would think investors would search for return, not yield, in which case, in our view compensation is not commensurate with the alternatives.

In late December last year, the yield on our HY index was over 7%, the highest it had been in over two and a half years. Just a few weeks back it was over 8% and year-to-date returns stand at -0.6%. High yield or higher yield than recently observed did not by themselves preclude an even higher yield or negative returns. Why opt for 2-3% returns in HY with its volatility, defaults and liquidity challenges when HG paper yields 3.3%, has less volatility and virtually non-existent default risk?

As Chart 8 shows, at extremely high yields, say over 15%, next-twelve-months (NTM) returns have always been positive and large. (Note all those points correspond to the 2008-2009 period.) But other than that, given a starting yield, the NTM return outcome can hardly be taken for granted. YTW for our HY index currently stands at 7.6%. Historically when yields were between 7.5% and 7.7%, NTM total return has ranged from -4.6% to +16.4%. While that may seem like great risk-reward at first glance, seventy-five percent of these occurrences resulted in a return below the starting yield. A third of the time returns were negative and two-thirds of the time below 5%. Combine

this with challenging market liquidity and the case for HY doesn't appear to be a slam-dunk any more in our opinion.

**Chart 8: Today's yield is barely an indication of future returns**

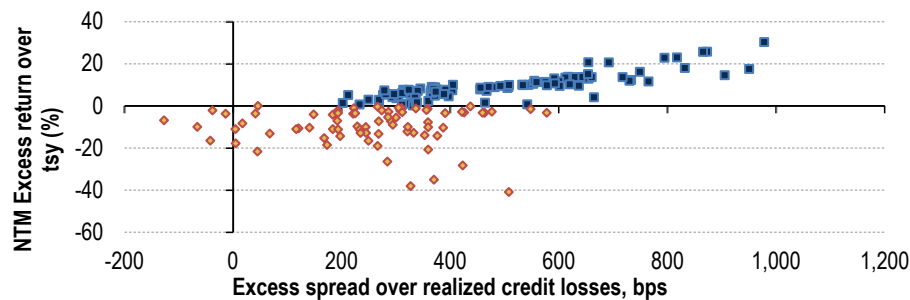


Source: BofA Merrill Lynch Global Research

### Premium over expected default losses is not unusually high

The other argument we hear is about how spread compensation given recent widening is more than commensurate given default expectations for 2016. The often cited metric here is the excess spread over the next twelve months of credit losses, and it's one we have used in the past to gauge the spread cushion (which includes liquidity premium). As Chart 9 shows however, HY has experienced negative excess returns even when spread was nearly 600bp above NTM realized credit losses- a figure significantly higher than today's.

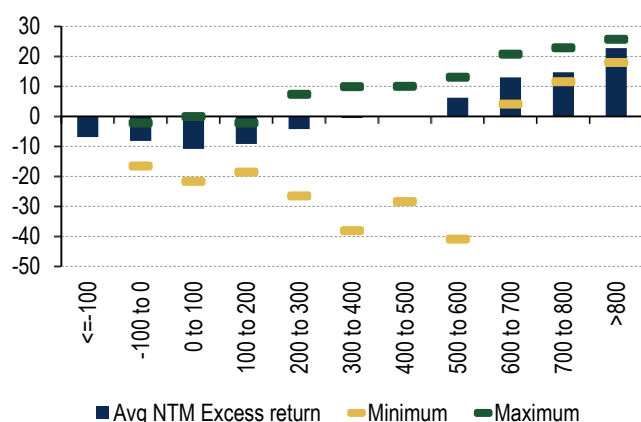
**Chart 9: How do you judge if spread premium over expected losses is appropriate?**



Source: BofA Merrill Lynch Global Research

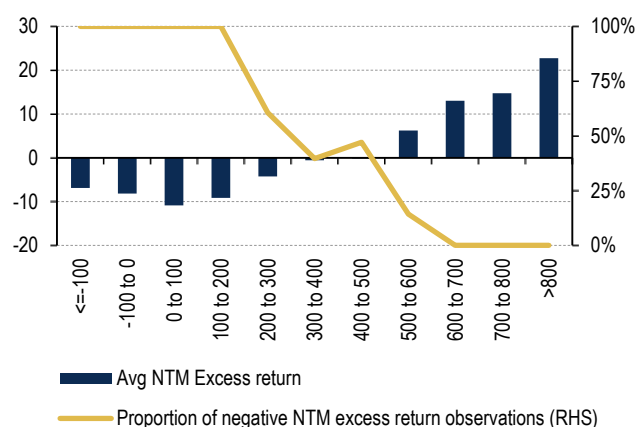
Chart 10 and Chart 11 show the average next-twelve-month 12m excess return for our HY index corresponding to different ranges of excess spread over NTM realized credit losses (OAS at the beginning of the 12m period minus realized losses over the period). Even in the 300-400bp range (where we are today), HY had negative excess returns on average, with a wide range between the best and worst case scenarios. When the spread premium over losses was in this range historically, HY has had negative NTM excess returns 40% of the time; when starting in the 400-500bp range excess returns were negative 47% of the time. Once again, it isn't clear to us that current valuations look all that compelling.

**Chart 10: NTM Excess return for diff ranges of (OAS – NTM realized loss)**



Source: BofA Merrill Lynch Global Research

**Chart 11: NTM Excess return for diff ranges of (OAS – NTM realized loss)**



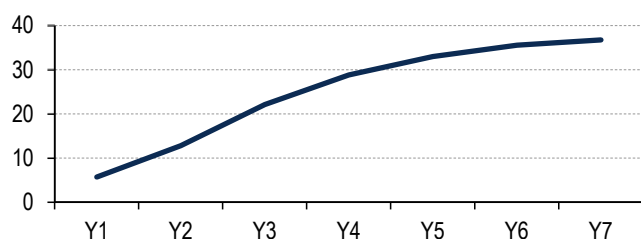
Source: BofA Merrill Lynch Global Research

### Valuations just about compensate for credit losses

Most importantly, we've often wondered if comparing spread to merely the next twelve months of credit losses is enough; what of the rest of a bond's life? The effect of credit losses occurs over the life of the portfolio with returns determined not just by the intensity but also the timing of defaults.

We run a somewhat simplistic analysis here. We start with our HY index which currently has a price of 93.84, an average coupon of 6.8% and average maturity of 6.3 years. As our base case we assume that this portfolio experiences defaults in a pattern similar to the 1999 HY cohort as shown in Chart 12 and Table 1. In our view, these default rates seem perhaps on the low side of our expectations, as the next credit cycle is likely to realize more cumulative losses than the early 2000s given the last credit cycle was cut short due to QE and easy monetary policy. Names that should have gone in 2009 or 2010, the "hanger ons", will likely default over the next 5 years in addition to those issuers that would go under more normal circumstances. Assuming a recovery rate of 35% (we have seen lower recovery rates post crisis and [expect lower than average recovery rates](#) for the remainder of the cycle) we evaluate cash-flows over the life of the portfolio to determine how well current valuations compensate for defaults.

**Chart 12: Cumulative default rate for the Jan-1999 HY cohort, percentage of issuers**



Source: BofA Merrill Lynch Global Research, Moody's

**Table 1: Annual and Cumulative default rates of 1999 US HY cohort**

Year	Annual Default Rate	Cumulative DR
2016	5.7	5.7
2017	7.1	12.8
2018	9.3	22.1
2019	6.7	28.8
2020	4.2	33.0
2021	2.6	35.6
2022	1.2	36.8

Source: BofA Merrill Lynch Global Research, Moody's

To do so, we assume that defaults occur at semi-annual intervals. At each time-period listed in Table 2 there is a coupon inflow, which is calculated as 6.8% times the notional remaining in the portfolio i.e. un-defaulted notional. When default occurs, the investor receives the recovery value of the bond and the remaining portfolio notional reduces by the par amount that defaulted. For example, at year 1, 2.85% of the portfolio's notional defaults. The investor receives 2.85% \* 35% i.e. recovery value and the HY portfolio's notional is reduced by 2.85% as the defaulted bonds leave the universe. The two cash-flows are added and discounted to present value in the last column.



**Table 2: Cash flows under a 1999 cohort-like default profile**

Date	Years from today	Default Rate	Coupon inflow	Par - Loss for defaulted names	Total cashflow, discounted
15-Jan-16	0.3y	2.85%	1.67%	1.00%	2.66%
15-Jul-16	0.8y	2.85%	3.21%	1.00%	4.19%
15-Jan-17	1.3y	3.55%	3.09%	1.24%	4.30%
15-Jul-17	1.8y	3.55%	2.97%	1.24%	4.16%
15-Jan-18	2.3y	4.67%	2.81%	1.63%	4.37%
15-Jul-18	2.8y	4.67%	2.65%	1.63%	4.18%
15-Jan-19	3.3y	3.34%	2.53%	1.17%	3.59%
15-Jul-19	3.8y	3.34%	2.42%	1.17%	3.45%
15-Jan-20	4.3y	2.09%	2.35%	0.73%	2.93%
15-Jul-20	4.8y	2.09%	2.28%	0.73%	2.83%
15-Jan-21	5.3y	1.30%	2.23%	0.46%	2.51%
15-Jul-21	5.8y	1.30%	2.19%	0.46%	2.44%
15-Jan-22	6.3y	0.59%	2.17%	64.04%	60.20%
Sum discounted cashflow					101.82%
Current Price					93.78%
Return					8.6% (1.4% annualized)

Source: BofA Merrill Lynch Global Research

Based on the above assumptions and default scenario, this analysis implies a return of 8.6% over the 6.3y life of the portfolio or 1.37% each year. That's hardly a 'high-yield' return. Why invest in HY for less than 2% in annual returns when the 10y Treasury is yielding 2% and HG yield is at 3.3%, both unlikely to see credit losses any time soon?

Although we recognize that investors are typically paid for their performance over the course of one year, and we don't suggest that spreads need to be at the levels mentioned below to be attractive investments, we do feel the need to properly lay out a better thought out framework for compensation for credit losses. In our view, the market needs to consider what it is you're getting paid for- all discounted future cash flows of that bond- rather than assume the standard 1-year horizon or simple duration times spread measure of expected loss. Additionally, we fundamentally disagree with the idea that the market prices in the correct level of defaults at all times. In fact, we don't need to look too far back to see that the market completely mispriced risk leading up to the summer, and based on the price action recently, we argue continues to struggle with how to value the default and liquidity premium in the market.

## Spread compensation nowhere near enough: 3 scenarios

### 1999 base case

Another way to look at the above is to figure out what the current spread needs to be in order to compensate you for the default risk you're taking in a frictionless environment (i.e, no liquidity premium). Consider that with the above default scenario, spreads would need to be 239bp wider (870bp) to replicate high grade's current yield (3.3%). In order to clip coupon every year for the next 5 years, investors should demand an additional 545bp of compensation over today's level (1176bp). Although perhaps not the most realistic scenario, we would argue it's more relevant than the simplistic measures mentioned above and certainly a more informative unbiased way to look at the question of where the money is going to go in the context of being compensated for future defaults.

### A benign credit cycle

Should the credit cycle prove to be incredibly benign, say just 23% cumulative defaults over the next 5 years (6%, 9%, 4%, 2% thereafter), the average annual return an investor would receive today over the life of the index would be 2.70%, still about 60bp below investment grade yield. To earn coupon in such a scenario, spreads would need to be 410bp wider than where they are today, or 1040bp.

### An aggressive credit cycle

Finally, should the default cycle prove to be particularly painful, realizing a cumulative default rate of 40% over 5 years (6%, 10%, 12%, 7%, 5%), annual returns over the life



of the portfolio would be just 0.26%. In this case, spreads would need to be 360bp wider than today (991bp) to equal the current investment grade yield or 653bp wider (1284bp) in order to earn coupon.

## Weekly Recap

High yield spreads have tightened meaningfully in the past week. As of October 13<sup>th</sup>, US HY OAS stands at 634bps, a 29bp decline from 1 week prior. Midway through October, the MTD return looks strong at 2.05%, though YTD remains negative (-0.81%). Similarly, ex-Energy spreads declined 25bps to 573bps on the week to bring its YTD return to 0.71% (Table 3). HY issuance has been muted for October with just 2 issuers tapping the primary market, whereas 10 unique companies have issued loans this month. On the flows side, HY ETFs had a record \$1.73bn (+5.3%) inflow while aggregate US HY saw inflows of \$1.16bn (+0.6%).

**Table 3: Spreads, yields, and returns**

Index	OAS	1W-Chg	1M-Chg	3M-Chg	YTW	MTD Return	YTD Return
US HY	634	-29	64	133	7.77	2.05%	-0.81%
HY ex-Energy	573	-25	62	113	7.15	1.72%	0.71%
HY ex-Materials	611	-28	61	130	7.54	2.06%	0.07%
HY ex-E&M	551	-26	62	114	6.93	1.74%	1.56%

Source: BofA Merrill Lynch Global Research

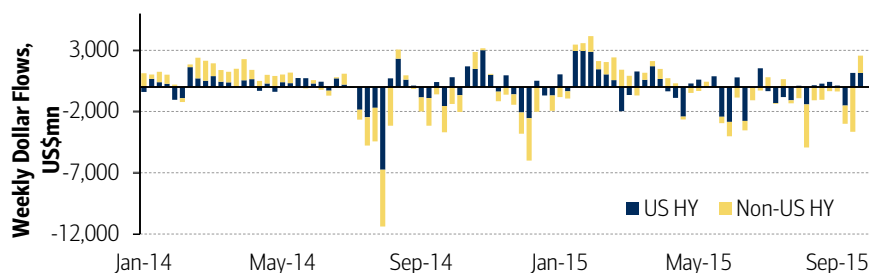
## Flows

This is an excerpt from our recently published report: [The High Yield Flow Report: Fixed income led by HY ETFs for 2nd week 15 October 2015](#)

High yield ETFs had a second strong week of inflows with a net increase in AUM of \$792mn (+2.3%). HY non-ETFs saw a more benign \$357mn (+0.2%) inflow, resulting in an aggregate \$1.15bn (+0.6%) net inflow for high yield. MTD, HY ETFs have added 9.75% AUM, driven by strong equity performance where the S&P 500 has returned 3.95% MTD. Also reporting flows this week were US high grade, which posted a \$1.47bn inflow (+0.1%), munis (+\$88mn, +0.0%), and leveraged loans (-\$69mn, -0.1%), Loans had their 12<sup>th</sup> consecutive week of net outflows and have lost 10.2% AUM YTD.

EM debt saw inflows of \$379mn (+0.1%), marking the first week of net inflows for the asset class since July 22<sup>nd</sup>. Emerging market funds have been hit hard this year from a strengthening USD and increasing threats of a global economic slowdown. Collectively, fixed income funds had \$2.74bn (+0.1%) in net inflows on the week while equities had net inflows of \$1.96bn (+0.0%).

**Chart 13: 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 high yield issuance was light this week with just \$400mn coming to market from 1 deal. The single pricing came from Scotts Miracle-Gro in a \$400mn issuance priced at par to yield 6%. There was only one issuance last week as well, coming from Stonegate Pub Co Financing in an £80mn offering (\$122mn). YTD, DM issuance is \$49bn behind last year's pace, while US issuance has lost steam in October to fall \$9bn behind 2014's pace. Of the \$268bn in primary paper this year, 35% has been BB-rated, while 51% has been B- and the remaining 14% rated CCC. This compares with YTD 2014, where 33% BB-rated, 49% was B-, and 18% rated CCC.

**Table 4: DM issuance summary (\$bn)**

	DM	United States	Europe	BB	B	CCC/NR
Wk Oct 09	0.4	0.4	0.0	0.0	0.4	0.0
Wk Oct 02	0.1	0.0	0.1	0.0	0.1	0.0
Wk Sep 25	10.8	5.2	5.6	4.0	6.3	0.5
Wk Sep 18	1.0	0.7	0.3	0.3	0.7	0.0
MTD Oct	0.5	0.4	0.1	0.0	0.5	0.0
September	21.0	14.5	6.1	12.1	8.4	0.5
August	10.3	9.8	0.1	2.3	5.8	2.2
July	18.3	7.4	6.4	7.2	8.6	2.4
YTD 2015	267.6	181.6	69.7	94.3	136.8	36.5
YTD 2014	316.2	190.4	111.4	104.2	156.2	55.9
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
2012	365.7	280.5	65.5	103.6	198.3	63.8

Source: BofA Merrill Lynch Global Research

**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
6/26/2015	6,364	2,600	2,920	724	120	5,655	709			335	6,029		1,050	3,314	2,000
7/3/2015	1,085		600	485		1,085					1,085		600	485	
7/10/2015	200	200				200					200			200	
7/17/2015	4,175	1,600	2,200	375		4,175					4,175		1,275	1,150	1,750
7/24/2015	10,708	5,437	4,159	1,112		3,305	6,528	875		3,507	7,201		2,366	8,342	
7/31/2015	3,191		2,271	920		2,480		711		1,096	2,095		273	2,917	
8/7/2015	4,342	700	1,832	1,810		4,270	72			1,282	3,060		1,407	2,935	
8/14/2015	4,600	1,100	3,500			4,600				500	4,100			4,300	300
8/21/2015	1,315	500	425	390		1,315					1,315		815		500
9/4/2015	256		256				256			256			33	223	
9/11/2015	8,934	7,784	1,150			8,650			284		8,934		7,600	1,034	300
9/18/2015	975	300	675			975				400	575		275	700	
9/25/2015	10,793	3,970	6,333	490		10,010	783			783	10,010		2,370	8,173	250
10/2/2015	122		122					122		122			122		
10/9/2015	400		400			400					400		400		

Source: BofA Merrill Lynch Global Research

At the single name level, the only pricing this week was a 6% 2023 bond with a \$400mn face value from Scotts Miracle-Gro (B1/B+). The Ohio-based lawn-care products company plans to use the proceeds to refinance their bank debt. Last week, the only primary activity was out of the United Kingdom with Stonegate Pub Co issuing £80 (\$122mn) worth of 5 ¾% 2019 senior secured notes (B2/B). The bonds were priced at 99.5 to yield 5.91% and are 144A with reg. rights. The England-based pub operator plans to use the proceeds to fund the acquisition of freehold pubs from Tattershall Castle Group.

**Table 6: Most recent HY bond issues**

Pricing Dt	Name	Size (\$)	Snr	Cpn	Maturity	Price	Yield	Moody's	S&P	Type	Sector	Region
10/7/2015	Scotts Miracle-Gro Co	400	Sr Nts	6.00	10/15/2023	100.00	6.00	B1	B+	144A w/RR	Housewares	United States
10/2/2015	Stonegate Pub Co Financing	122	Sr Sec Nts	5.75	4/15/2019	99.50	5.91	B2	B	144A w/RR	Retail	Europe
9/25/2015	Interoute Finco plc	391	Sr Sec Nts	7.38	10/15/2020	100.00	7.38	B1	B+	144A for Life	Telecommunications	Europe
9/25/2015	Interoute Finco plc	268	Sr Sec Nts	6.25	10/15/2020	100.00	6.21	B1	B+	144A for Life	Telecommunications	Europe
9/25/2015	Neptune Finco Corp t/b/m/w/into CSC Holdings Inc (Cablevision)	1800	Sr Nts	10.13	1/15/2023	100.00	10.13	B2	B-	144A for Life	Telecommunications	Europe
9/25/2015	Neptune Finco Corp t/b/m/w/into CSC Holdings Inc (Cablevision)	1000	Sr Nts	6.63	10/15/2025	100.00	6.63	Ba1	BB-	144A for Life	Telecommunications	Europe
9/25/2015	Neptune Finco Corp t/b/m/w/into CSC Holdings Inc (Cablevision)	2000	Sr Nts	10.88	10/15/2025	100.00	10.88	B2	B-	144A for Life	Telecommunications	Europe
9/25/2015	Blue Cube Spino Inc. (Olin)	500	Sr Nts	10.00	10/15/2020	100.00	10.00	Ba1	BB+	144A w/RR	Chemicals	United States
9/25/2015	Blue Cube Spino Inc. (Olin)	720	Sr Nts	9.75	10/15/2023	100.00	9.75	Ba1	BB+	144A w/RR	Chemicals	United States
9/24/2015	Iron Mountain Incorporated	1000	Sr Nts	6.00	10/1/2020	100.00	6.00	Ba3	B+	144A for Life	REITS	United States
9/24/2015	Beacon Roofing Supply	300	Sr Nts	6.38	10/1/2023	100.00	6.38	B3	B+	144A w/RR	Distribution/Wholesale	United States
9/23/2015	Arrow Global Finance plc	123	Sr Sec Nts	525.00	11/1/2021	100.00	0.00	B1	BB-	144A for Life	Diversified Finan Serv	Europe
9/22/2015	Orbital ATK, Inc.	400	Sr Nts	5.50	10/1/2023	100.00	5.50	Ba3	BB	144A w/RR	Aerospace/Defense	United States
9/22/2015	Building Materials Corporation of America	1100	Sr Nts	6.00	10/15/2025	100.00	6.00	Ba2	BB+	144A for Life	Building Materials	United States
9/21/2015	Tempur Sealy International, Inc.	450	Sr Nts	5.63	10/15/2023	100.00	5.63	B1	BB-	144A w/RR	Home Furnishings	United States

Source: BofA Merrill Lynch Global Research

## Loans

Global loan issuance was light as well this week, with AssuredPartners Inc being the only issuer to bring \$1.1bn new money in a two-tranche offering. The 2<sup>nd</sup> lien tranche (Caa2/CCC+) has a \$337mn face value and pays L+900bps (100bp floor). The higher rated 1<sup>st</sup> lien senior secured tranche (B1/B) has a \$762mn face value and pays L+450bps (100bp floor). Proceeds from the offering will be used to fund the company buyout by Apax Partners, a UK—based private equity and venture capital firm.

**Table 7: Global loan issuance over time (\$bn)**

	Global	BB	B	CCC/NR	Cov lite	2nd lien
Wk Oct 09	2.8	0.5	1.9	0.3	1.5	0.5
Wk Oct 02	2.8	0.3	2.4	0.0	1.8	0.1
Wk Sep 25	9.8	6.0	3.4	0.4	7.3	0.7
Wk Sep 18	2.7	0.5	1.7	0.6	1.7	0.6
MTD Oct	4.8	0.8	3.7	0.3	2.6	0.5
September	18.4	9.1	8.2	1.1	14.7	1.5
August	9.5	4.7	4.5	0.2	8.2	0.2
July	37.9	11.0	24.3	2.6	27.1	2.6
YTD 2015	212.2	88.9	112.8	10.4	146.6	10.6
YTD 2014	342.5	101.9	193.9	46.7	244.3	33.2
2014	379.4	109.5	218.3	51.6	267.1	36.6
2013	454.9	152.8	261.7	40.4	279.1	28.9
2012	295.3	105.0	161.9	28.4	97.5	17.2

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

**Table 8: New issue breakdown by week, last 3 months**

	Total	Ratings					2nd Lien	Cov Lite
		BB	B	CCC	NR	TLb		
7/10/2015	2,883	1,068	1,571	245		2,538	345	1,816
7/17/2015	10,390	2,700	6,855	835		9,555	835	9,970
7/24/2015	15,834	5,565	9,267	1001.5		14,972	861.5	9,379
7/31/2015	8,184	1,620	5,999	564.5		7,619	564.5	5,261
8/7/2015	6498	2987	3306	205		6256	242	5851
8/14/2015	2,755	1,700	1,055			2,755		2,255
8/21/2015	172	45	127			172		45
9/4/2015	45		45			45		45
9/11/2015	5,207	2,550	2,482	175		5,032	175	5,002
9/18/2015	2,743	525	1,662	556		2,187	556	1,678
9/25/2015	9,760	6,025	3,370	365		9,045	715	7,345
10/2/2015	2,756	292	2,434	30		2,665	91.9	1,814
10/9/2015	2,789	530	1,922	337		2,327	462	1,524

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

MTD in October, 10 companies have commissioned the primary loan market to bring \$4.8bn in new money. YTD global loan issuance stands at \$212.2bn, \$130bn behind last year's pace. The continuing threat of rising interest rates remains a headwind to the primary loan market.

**Table 9: Recent loan issues, last 2 weeks**

Launch Dt	Issuer	Deal Name	Size (\$)	New Inst. Money (\$)	Moody's	S&P	Asset Backed	Cov Lite	Proceeds	Sector	Region
10/7/2015	AssuredPartners Inc	AssuredPartners (2nd Lien 11/15)	337	337	Caa2	CCC+	No	Yes	LBO	Services & Leasing	North America
10/7/2015	AssuredPartners Inc	AssuredPartners (TL 11/15)	762	762	B1	B	No	Yes	LBO	Services & Leasing	North America
10/6/2015	Affordable Care Inc	Affordable Care (11/15)	365	325	B2	NR	No	No	LBO	Healthcare	North America
10/6/2015	Cowlitz Tribal Gaming Authority	Cowlitz Tribal (TL 11/15)	410	410	NR	B	No	No	Project Financing	Entertainment & Leisure	North America
10/6/2015	OM Group Inc	OM Group (2nd Lien 11/15)	125	125	B3	B-	No	Yes	LBO	Chemicals	North America
10/6/2015	OM Group Inc	OM Group (US TL 11/15)	300	300	Ba3	B	No	Yes	LBO	Chemicals	North America
10/5/2015	American Apparel Inc	American Apparel (DIP 11/15)	90	30	NR	NR	No	No	DIP	Textile & Apparel	North America
10/5/2015	B&G Foods Inc	B&G Foods (Add-on 11/15)	500	500	Ba3	BB+	No	No	Acquisition	Food & Beverage	North America
10/1/2015	Concordia Healthcare Corp	Concordia Healthcare (US TL 11/15)	1100	1100	B1	B+	No	Yes	Acquisition	Healthcare	North America
10/1/2015	GTT Communications Inc	GTT Comm (11/15)	450	400	B2	B+	No	No	Acquisition	Telecom	North America
10/1/2015	GTT Communications Inc	GTT Comm (11/15)	450	400	B2	B+	No	No	Acquisition	Telecom	North America
10/1/2015	Sucampo Pharmaceuticals Inc	Sucampo (11/15)	250	250	B3	B	No	No	Acquisition	Healthcare	North America
10/1/2015	Koninklijke TenCate NV	TenCate (US 11/15)	231	231	NR	NR	No	No	LBO	Textile & Apparel	EMEA
10/1/2015	Koninklijke TenCate NV	TenCate (US 2nd Lien 11/15)	62	62	NR	NR	No	No	LBO	Textile & Apparel	EMEA
9/30/2015	MedImpact Healthcare Systems	MedImpact (10/15)	350	350	B1	B+	No	Yes	Refinancing	Insurance	North America

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

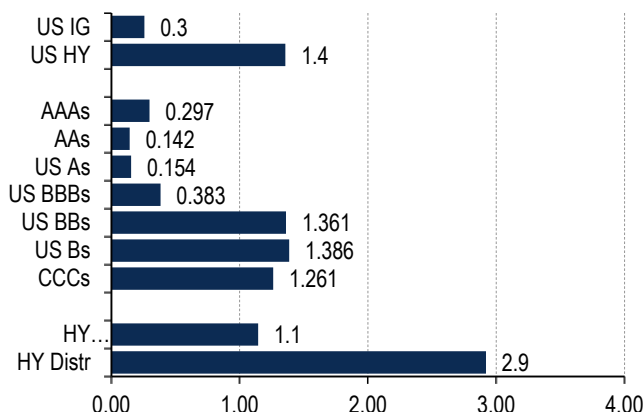
# Performance Summary

Overall performance was positive last week with risk outperforming quality. The top performing class was EM equity which posted 3.09% WoW return, followed by US HY (+1.36%) and CDX HY (+1.27%). US IG added 0.26% and leveraged loans tacked on 0.14%. The only asset classes to post negative WoW returns were TIPs (-0.27%), 5yr treasuries (-0.13%), and mortgages (-0.03%).

With respect to US corporates, higher beta paper outperformed with distressed bonds providing the highest return on the week (+2.9%). Meanwhile, CCs added 1.26%, Bs were up 1.39%, and BBs gained 1.36%. In investment grade land, A-rated paper tacked on 0.15%, while AAs and AAAs increased 0.14% and 0.30%, respectively.

All 18 high yield sectors were in positive territory for the week. Energy took the top spot with a 3.24% WoW return, followed by materials (+1.73%), utilities (+1.56%), and telecom (+1.49%). Retail (+0.26%), consumer products (+0.50%), and technology (0.52%) underperformed, though still posted net positive returns.

**Chart 14: Segment and rating returns, week-on-week (WoW)**



Source: BofA Merrill Lynch Global Research

## Top performers

Energy names took the top 7 spots for single name performance last week due to a rally in oil prices. Despite S&P's recent downgrade to CCC+ from B-, the Energy XXI Gulf 9 ¼'s gained 41.5%. The Linn Energy 7 ¾'s and 6 ½'s gained 31.8% and 21%, respectively, while Penn Virginia's 8 ½'s were up 23.4%. The top non-energy paper was the Tronox 6 ¾'s (+20.9%) on speculation that it could be the target of an acquisition by Apollo Global Management.

## Bottom performers

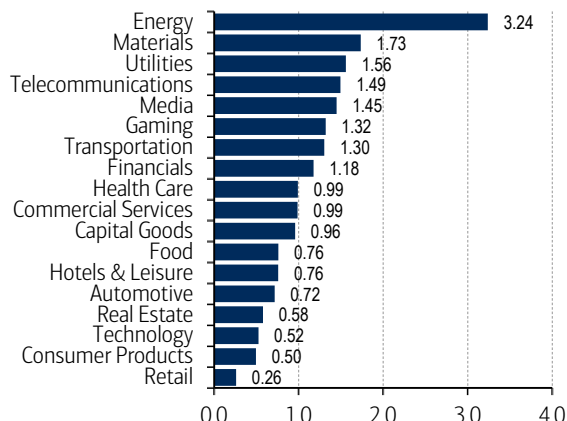
The worst performing bond last week was the Magnum Hunter 9 ¾'s (-4%) after the company announced it is suspending dividend payments on its preferred stock and hired a financial adviser to explore strategic restructuring alternatives. The Dell 5 ⅝'s were also laggards on the week (-0.6%) following the

**Table 10: Total returns across asset classes**

Ticker	Name	WOW (%)	MTD (%)	YTD (%)
GOQI	TIPs	-0.27	0.82	-0.32
GA05	5yr TRSY	-0.13	0.11	3.02
MOAO	Mortgages	-0.03	0.15	1.67
UOAO	Municipals	0.02	0.17	1.98
LCDI/ALL	Lev Loans	0.14	-0.12	1.31
COAO	US IG	0.26	0.59	0.51
CDXIG	CDX.IG	0.30	0.61	0.16
EMGB	EM Govts	0.35	1.96	1.78
EMIB	EM IG	0.38	1.24	1.09
HE00	EU HY	0.76	1.77	1.27
SPX	S&P 500	1.20	4.36	-2.68
EMHB	EM HY	1.24	3.19	4.23
CDXHY	CDX.HY	1.27	2.59	0.74
HOAO	US HY	1.36	2.01	-0.57
MXEF	EM Eqty	3.09	7.86	-10.67

Source: BofA Merrill Lynch Global Research

**Chart 15: Sector returns, week-on-week (WoW)**



Source: BofA Merrill Lynch Global Research

**Table 11: Top 10 performers October 6<sup>th</sup> – October 13<sup>th</sup>**

Issue	Rating	Price	Yield (%)	ZSpread	Px Change	Px Change (%)	Volume
EXXI 9.25 '17	CCC2	37.15	69.20	6833	10.9	41.5	12
LINE 7.75 '21	B3	33.23	37.76	3639	8.0	31.8	30
PVA 8.5 '20	CCC2	28.88	48.63	4737	5.5	23.4	17
SD 7.5 '21	C	26.81	43.76	4244	4.9	22.2	20
LINE 6.5 '21	B3	30.79	34.86	3343	5.4	21.4	13
VNR 7.88 '20	B3	62.25	21.43	2018	10.8	21.0	25
LINE 8.63 '20	B3	35.42	41.39	4015	6.1	21.0	26
TROX 6.38 '20	B2	72.51	14.47	1311	12.5	20.9	26
SD 8.13 '22	C	26.61	39.90	3838	4.4	19.9	17
DNR 4.63 '23	BB3	66.45	11.22	945	10.6	19.0	10

Source: BofA Merrill Lynch Global Research

**Table 12: Bottom 10 performers October 6<sup>th</sup> – October 13<sup>th</sup>**

Issue	Rating	Price	Yield (%)	ZSpread	Px Change	Px Change (%)	Volume
MHR 9.75 '20	CC	44.67	34.71	3348	-1.9	-4.0	32
GYMB 9.13 '18	CCC3	30.88	61.16	6004	-0.7	-2.3	8
BONT 8 '21	CCC1	59.65	20.29	1886	-0.6	-1.1	10
TGI 4.88 '21	B1	92.49	6.53	512	-0.7	-0.7	14
DELL 5.88 '19	BB2	103.01	4.97	386	-0.6	-0.6	11

company's announced acquisition of EMC. Also posting poor returns this week were the GYMB 9 <sup>1</sup>/<sub>8</sub>'s (-2.3%), BONT 8's (-1.1%), and TGI 4 <sup>7</sup>/<sub>8</sub>'s (-0.7%).

INTEL 7.75 '21	CCC2	66.02	17.47	1607	-0.4	-0.5	47
CVC 7.63 '18	BB2	105.69	5.30	447	-0.3	-0.3	14
AER 4.63 '21	BB1	101.15	4.39	294	-0.3	-0.3	10
CAA 8.38 '18	B1	113.16	3.03	215	-0.3	-0.2	7
AMGFN 6.9 '17	B2	104.47	4.70	393	-0.2	-0.2	6

Source: BofA Merrill Lynch Global Research

## Rating Actions

Last week we saw just 5 downgrades and 4 upgrades from high yield issuers, although there were several initiations and drops. Of note was SandRidge Energy Inc's selective default rating by S&P, from CCC+. The ratings action came after Sandridge announced plans to repurchase \$100mn senior unsecured notes at 30% of principal and exchange another \$300mn of the same notes into convertibles. S&P viewed the repurchase as a distressed exchange because at the close of the transaction investors will receive less than what was promised on the original securities. 3 days prior to the debt exchange, SandRidge agreed to acquire Pinon Gathering from EIG Global Energy for \$126mn.

1 rising star emerged last week as The Telx Group was upgraded to investment grade status. S&P improved the corporate credit rating on the data center company from B- to BBB, then subsequently withdrew the rating following its \$1.9bn acquisition by DLR and the repayment of all the company's debt.

1 downgrade of note was S&P's demotion of Scotts Miracle-Gro from BB+ to BB on October 7<sup>th</sup>. The reduced credit rating was caused by the lawn and garden product company's issuance of a \$1.6bn revolver and \$300mn senior unsecured term loan, which will be used to repay existing revolver borrowings. S&P expects the company to continue to add debt over the next two years for share repurchases and acquisitions.

Year-to-date between Moody's and S&P, there have been a combined 344 upgrades and 546 downgrades from US domiciled high yield companies, for an upgrade/downgrade ratio of 0.63. This compares with 401 upgrades and 383 downgrades at this point last year, resulting in an upgrade/downgrade ratio of 1.05.

**Table 13: Ratings action on HY issuers**

Date	Action	Company Name	Rating Type	Agency	Curr Rtg	Last Rtg
10/08/2015	Default	SandRidge Energy Inc	LT Local Issuer Credit	S&P	SD	CCC+
10/09/2015	Downgrade	Abaco Energy Technologies LLC	LT Local Issuer Credit	S&P	CCC+	B-
10/07/2015	Downgrade	Scotts Miracle-Gro Co/The	LT Local Issuer Credit	S&P	BB	BB+
10/13/2015	Downgrade	Talen Energy Supply LLC	LT Local Issuer Credit	S&P	B+	BB- *
10/08/2015	Downgrade	Valitas Health Services Inc	LT Local Issuer Credit	S&P	CCC *	B- *
10/13/2015	Downgrade	XPO Logistics Inc	Senior Unsecured Debt	Moody's	B2	B1 *
10/13/2015	Dropped	AAC Group Holding Corp	LT Local Issuer Credit	S&P	NR	CCC+
10/07/2015	Dropped	Alaska Communications Systems Holdings Inc	LT Local Issuer Credit	S&P	NR	B+
10/13/2015	Dropped	American Achievement Corp	LT Local Issuer Credit	S&P	NR	CCC+
10/09/2015	Dropped	AVINTIV Specialty Materials Inc	LT Local Issuer Credit	S&P	NR	B- *
10/12/2015	Dropped	Hanger Inc	LT Local Issuer Credit	S&P	NR	BB- *
10/09/2015	Dropped	Hospira Inc	LT Local Issuer Credit	S&P	NR	AA-
10/07/2015	Dropped	Meritas Schools Holdings LLC	LT Local Issuer Credit	S&P	NR	B-
10/12/2015	Dropped	Telx Group Inc/The	LT Local Issuer Credit	S&P	NR	BBB
10/07/2015	Dropped	Wildhorse Resources LLC	LT Local Issuer Credit	S&P	NR	B
10/13/2015	Initiated	Affordable Care Holding Corp	LT Local Issuer Credit	S&P	B-	
10/13/2015	Initiated	Affordable Care Inc	LT Local Issuer Credit	S&P	B-	
10/07/2015	Initiated	Dolphin Merger Sub Inc	LT Local Issuer Credit	S&P	B	
10/13/2015	Initiated	Plaskolite Inc	LT Local Issuer Credit	S&P	B	
10/09/2015	Initiated	Sundial Group LLC	LT Local Issuer Credit	S&P	B-	
10/08/2015	Upgrade	CalAtlantic Group Inc	Senior Unsecured Debt	Moody's	Ba2	B1
10/08/2015	Upgrade	Central Garden & Pet Co	LT Local Issuer Credit	S&P	BB-	B+
10/07/2015	Upgrade	Shale-Inland Holdings LLC	Senior Secured Debt	Moody's	Caa2	Caa1
10/11/2015	Upgrade	Telx Group Inc/The	LT Local Issuer Credit	S&P	BBB	B- *

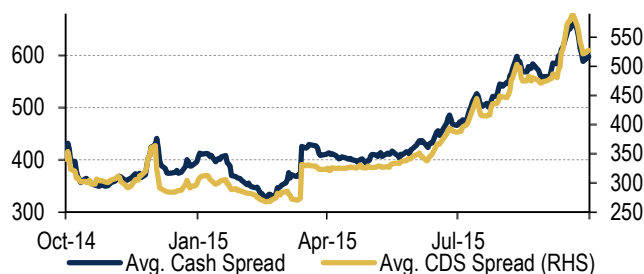
Source: BofA Merrill Lynch Global Research

# Relative Value

## Cash v. CDS

Synthetics outperformed cash on the week (Table 14). CDX HY tightened by 16bps compared to 10bp of tightening for our HY cash index (Table 14). The average basis for CDX HY issuers became less negative, increasing from -76bps to -70bps (Chart 17).

**Chart 16: 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.

**Table 14: CDX vs. ML Cash Indices**

Index	Spread	1W-Chng	1M-Chng	3M-Chng
CDX IG	84	-3	0	12
HG Cash	168	-2	10	30
CDX HY	459	-16	1	41
HY Cash	570	-10	25	124

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

**Chart 17: Average cash-CDS 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

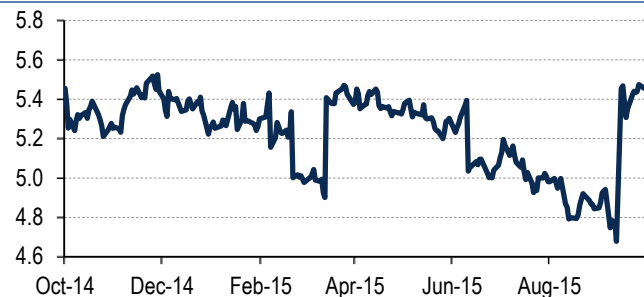
CDS indices in the US and Europe tightened over the week (Table 15). Indexes outperformed single names in CDX IG and HY this week, although single-names fared better across the pond with skews in iTraxx Main and XO becoming more negative. The HY/IG spread ratio is now at 5.45, increasing 0.03 since last week (Chart 18). The XO-HY spread declined 3bps to -126bps (Chart 19).

**Table 15: 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	84	-3	0	12	92	-6	2	14	-8	3	-3	-2
CDX HY	459	-16	1	41	467	-30	16	65	-8	13	-16	-23
iTraxx Main	80	-5	3	10	83	-4	3	12	-3	-1	-1	-3
iTraxx XO	333	-13	11	61	348	-10	9	56	-15	-3	2	5

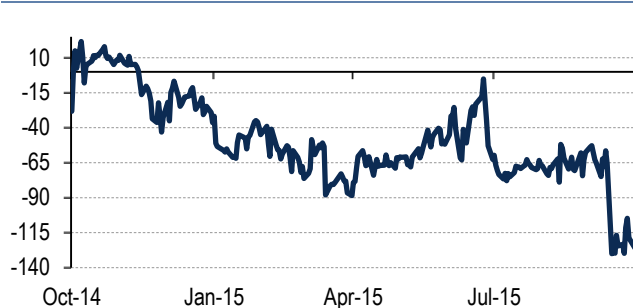
Source: BofA Merrill Lynch Global Research

**Chart 18: HY/IG**



Source: BofA Merrill Lynch Global Research

**Chart 19: XO-HY**

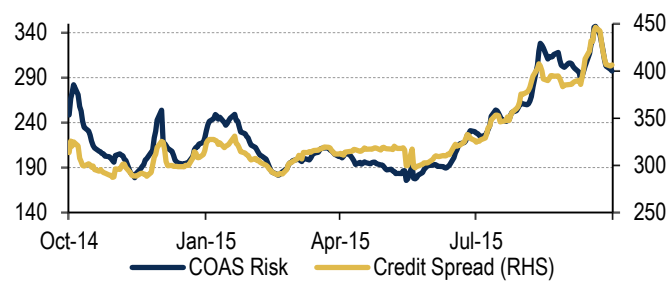


Source: BofA Merrill Lynch Global Research

## Credit v. Equities

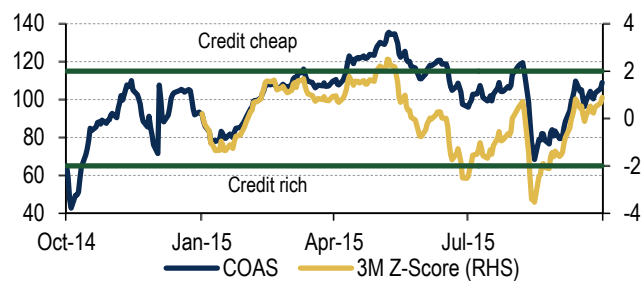
Average spread for our HY universe tightened by 24bp compared to a 31bp decrease in the equity implied credit risk (Chart 20). The US HY COAS value accordingly widened by 8bps to bring the 3m z-score to 0.89, a whopping 60bp increase from last week (Chart 21). This implies that credit is beginning to look cheap relative to its equity implied credit risk.

Chart 20: US HY COAS Risk vs. Spread



Source: BofA Merrill Lynch Global Research

Chart 21: US HY COAS & Z-Score



Source: BofA Merrill Lynch Global Research



# Disclosures

## Important Disclosures

### BofA Merrill Lynch Credit Opinion Key

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Recommendation	Investor Action Points (Cash and/or CDS)	Primary Investment Return Driver
Overweight-100%	Up to 100% Overweight of investor's guidelines	Compelling spread tightening potential
Overweight-70%	Up to 70% Overweight of investor's guidelines	Carry, plus some spread tightening expected
Overweight-30%	Up to 30% Overweight of investor's guidelines	Good carry, but little spread tightening expected
Underweight-30%	Down to 30% Underweight of investor's guidelines	Unattractive carry, but spreads unlikely to widen
Underweight-70%	Down to 70% Underweight of investor's guidelines	Expected spread underperformance
Underweight-100%	Down to 100% Underweight of investor's guidelines	Material spread widening expected

Time horizon – our recommendations have a 3 month trade horizon

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