



The wrath of assets gone

Not only will defaults be likely higher than in past cycles, but credit losses are also likely to be worse than ever before. That's because recoveries, even outside of the commodity space have been paltry in the post crisis years. Given where we are in the default cycle, prevailing recoveries are a full 10 points lower than where they should be. Given that HY companies have seen hardly any organic growth within last few years, it is of little surprise that recoveries today are so low. The bad news is that we think they are going to decline further. In this week's The HY Wire we introduce a recovery model to determine the extent to which recoveries can decline as we weather the default cycle.

Poor Q4 earnings not just a commodity story

Last week saw a continuation of a strong labor market as nonfarm payrolls rose 215,000 in March. And although the manufacturing sector realized the second consecutive month of job losses, the report was generally strong across all other industries. Despite the strong payroll data, however, the economy still appears to be headed in the wrong direction, as our economist's tracking model now indicates just 0.6% Q1 GDP growth and a revised 2.0% (from 2.3%) for Q2. More importantly for high yield investors, however, is that earnings growth continues to be anemic. Even with 1-off adjustments 6 out of 17 sectors realized negative year-over-year Adjusted EBITDA in Q4, with a 7th sector growing at just 0.5%. On an unadjusted basis, 9 sectors realized negative EBITDA growth for Q4.

Flows:

US HY fund flows stabilized from their record breaking +\$13.3bn over the past 5 weeks, though the asset class still managed to gain a net +\$172mn (+0.08%) this past week. In terms of %AUM, the inflows were evenly split between ETFs (+\$47mn, +0.1%) and non-ETFs (+\$124mn, +0.1%)

Issuance:

High yield issuance continued to gain momentum last week with \$8.2bn coming to market, led by a \$5.2bn megadeal from Western Digital Technologies for the largest pricing since Frontier Communications' \$6.6bn in September 2015. March concluded with \$21.95bn in DM HY issuance, more than the past 3 months combined.

Performance:

Dovish commentary from Yellen & Co at the beginning of last week helped all major asset classes deliver positive week-over-week total returns. US HY was towards the bottom of the performance stack, though still gained +0.34%. Meanwhile, investment grade corporates were up +0.75% for the 6th best weekly return across various asset classes.

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The View From Above

Poor Q4 earnings not just a commodity story

Last week saw a continuation of a strong labor market as nonfarm payrolls rose 215,000 in March. And although the manufacturing sector realized the second consecutive month of job losses, the report was generally strong across all other industries. Luckily for the Fed the increase in the participation rate (from 62.9% to 63.0%) likely means that in the near term the economy can create jobs without creating serious wage and price inflation. In fact, our [economists note](#) that in the past six months both the labor force and household employment have grown by 400,000 per month. However, had the participation rate been flat over this period, the labor force would have grown 150,000 per month, pushing the unemployment rate down to just 4.1%; way below the FOMC's estimates for full employment. The uptick in participation, then, allows the Fed to remain somewhat dovish while also not diminishing its optimism for 2 hikes this year.

Despite the strong payroll data, however, the economy still appears to be headed in the wrong direction, as our economist's tracking model now indicates just 0.6% Q1 GDP growth and a revised 2.0% (from 2.3%) for Q2. Should our team's figures hold, the period ending March 31st will mark the 3rd consecutive quarterly decline in GDP and the second sub 1% quarter in the last 5. More importantly for high yield investors, however, is that earnings growth continues to be anemic. [2 weeks](#) ago we wrote that too much emphasis has been placed on Adjusted EBITDA, an approximation of cash flow that doesn't take into account "1-off" charges, working capital, capex, etc. Although we understand the allure of this measure, in our eyes it has the tendency to cover up late cycle problems; namely asset impairments. With the understanding, however, that this measure is likely to be used for some time to come, we highlight the following: Even with 1-off adjustments 6 out of 17 sectors realized negative year-over-year Adjusted EBITDA in Q4, with a 7th sector growing at just 0.5%. On an unadjusted basis, 9 sectors realized negative EBITDA growth for Q4.

Because one quarter doesn't tell the whole picture of a company's earnings momentum, we also calculated both Adjusted and Unadjusted EBITDA by weighting the last 5 quarters 30%, 25%, 20%, 15%, 10% (Q4 2015 having the highest weight Q4 2014 the lowest). What we find is that the commodities sectors are clearly not the only industries to be experiencing troubles as Capital Good, Commercial Services, Consumer Products, Gaming, Media, Retail, Technology and Utilities are all under pressure. Additionally, on an unadjusted basis Healthcare also doesn't look like the darling some firm's spreads would suggest.

Table 1: Both Adjusted and Unadjusted EBITDA (GAAP) look poor

	Q4 2015		Q3 2015		Q2 2015		Q1 2015		Q4 2014		wtd Average	
Sector	GAAP	Adj	GAAP	Adj	GAAP	Adj	GAAP	Adj	GAAP	Adj	GAAP	Adj
Automotive	10.0	11.5	-2.9	0.3	0.3	18.9	18.4	2.2	2.8	8.0	5.4	8.4
Capital Goods	98.5	4.7	-36.5	-43.9	-7.5	-3.0	-10.3	12.3	-49.4	-15.0	12.5	-9.8
Commercial Services	-10.3	-12.0	3.9	6.1	6.6	6.6	7.5	16.1	-11.7	1.3	-0.8	1.8
Consumer Products	-13.6	0.5	8.7	-11.9	6.5	5.8	-8.9	-8.9	13.4	4.2	-0.6	-2.6
Energy	-451.0	-26.4	-233.6	-16.7	-156.1	-12.0	-117.1	-23.4	-58.7	-3.0	-248.3	-18.3
Food	7.4	9.5	12.3	-8.6	16.3	20.3	32.1	60.6	18.1	26.8	15.2	16.5
Gaming	-77.1	33.3	-31.4	10.0	3.9	3.4	-2.3	-1.5	-38.0	-14.3	-34.3	11.5
Health Care	-3.4	16.3	-1.6	9.6	20.3	18.3	-4.9	15.4	15.8	16.4	3.5	14.9
Hotels & Leisure	25.8	15.0	3.8	14.3	8.3	16.4	10.6	10.2	-4.5	8.1	11.5	13.7
Materials	-71.8	-33.8	-152.6	-19.6	-96.6	-10.1	-1.3	5.9	10.2	14.1	-78.2	-14.8
Media	9.7	9.2	-45.2	0.1	2.0	5.0	-8.8	4.9	-3.6	5.7	-9.7	5.1
Real Estate	29.9	16.3	19.3	15.6	31.9	19.3	7.8	7.1	27.3	17.1	24.1	15.4
Retail	-63.6	-1.0	24.7	4.7	10.5	8.9	18.9	12.2	15.2	31.2	-6.4	7.6
Technology	-16.0	-19.8	-1.0	-2.9	-13.6	-2.3	4.9	8.4	1.2	11.2	-6.9	-4.7
Telecommunications	92.5	25.1	17.8	21.5	-2.8	-3.0	7.3	7.9	-31.4	-2.0	29.6	13.3
Transportation	8.3	46.5	130.6	146.3	44.6	28.5	65.7	18.0	87.6	84.1	62.7	67.3
Utilities	-224.8	-32.3	-25.4	-0.4	0.3	-0.9	-7.9	-3.3	30.5	-40.7	-71.9	-14.5

Source: BofA Merrill Lynch Global Research, Bloomberg.

In addition to weak earnings in Q4, we have also seen defaults begin to accelerate, downgrades increase and bank (and investor) lending standards tighten. And as earnings and asset erosion cause spreads to widen, we have also seen a commensurate decline in

recovery rates. Lower recovery rates this cycle is something we have written a lot about over the last several years, and in fact spent a piece last year devoted to the topic in what was part one of a two-part series. Today we revisit the theme with some analysis that suggests this cycle is likely to realize the worst recovery rates in the history of the high yield bond market.

Weekly Recap

US HY widened 11bps on a week-over-week basis, though a 16bp drop in the 5yr helped the asset class deliver a +0.31% return. US HY spreads remain 26bps tighter from 1 month ago, though only -13bps ex-Energy as commodity sectors have outperformed off the back of more stable Energy prices and short covering within the space. With the 1st quarter of 2016 officially in the books, YTD returns currently stand at +2.95% (+3.03% ex-Energy). Flows moderated into high yield last week, though the asset class still managed to gain a net +\$172mn (+0.08%) for the 7th consecutive influx. Issuance continues to gain steam as \$8.2bn was priced last week, led by a \$5.2bn megadeal from Western Digital Technologies. All corporate rating buckets delivered positive returns last week, though risk outperformed and triple-Cs managed to gain 14.77%.

The wrath of assets gone

We've written on multiple occasions how the main question mark surrounding the end of this credit cycle is its shape, not whether we're currently living through it. As mentioned above, fundamentals have been consistently deteriorating even outside of commodities, defaults are rising, new credit creation is becoming difficult, and illiquidity is still a problem. Although technical tailwinds in the form of retail inflows and supportive central bank policies can prolong the market unwind, they do not change its direction as ultimately fundamentals will prevail.

In terms of the shape of this cycle, absent a recession we expect the pace of defaults to be much closer to the 1998 experience than the 2007 one. In fact, we have coined the phrase "a rolling blackout" to describe the potential for a period of many years where the market experiences general weakness and moderately high defaults as individual sectors take turns realizing their moment of distress. Whether these moments are based on a deterioration of underlying fundamentals, an unwind of crowded trades, or some sort of series of macro-economic incidents is nearly irrelevant, as the uncertainty and consistent underperformance of the overall market will likely frustrate many investors and asset allocators. In our view this is not unlike the 1998-2002 experience, where the very same scenario could played out: years of high yield underperformance, poor returns and moderately high defaults. Recall in those years, high yield returned 2.9%, 2.5%, -5%, 4.4%, -1.9% (and 3 years in a row of negative excess returns) while the default rate slowly crept up from 2% to 8% over the course of 3.5 years before hitting double digits.

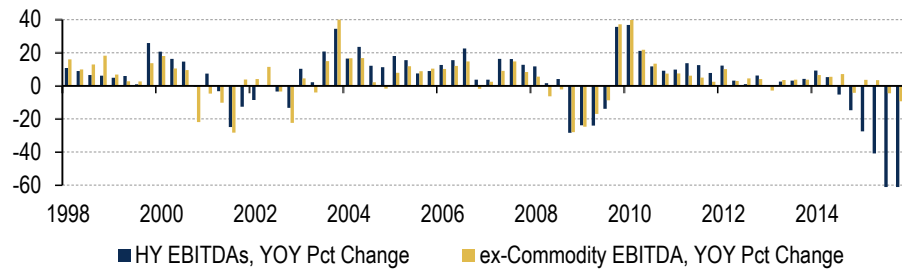
Should the market realize a mid to high single digit default rate for years cumulative losses over the length of the entire cycle could be worse than we've ever seen before. A total of 33% of issuers defaulted over the course of the 1987 and 1999 default cycles, higher than the 25% in 2008 as the latter benefitted from unprecedented central bank intervention. But the very same policies which helped alleviate the pain in the last cycle will likely add to the severity of the next one. This is because many of the companies that should have defaulted 7 years ago but instead received a lifeline will likely shutter doors now. As risk premiums have caused yields to jump nearly 400bp, many of these firm's business models will now likely be unsustainable; especially given the lack of EBITDA growth we have seen this cycle (Chart 1). When these issuers are then coupled with the newest crop of unsustainable businesses from this credit cycle, we could see cumulative default rates approaching 40% this cycle versus the traditional 33%.

Table 2: Spreads, yields, and returns

Index	OAS	1W-Chg	1M-Chg	YTW	WoW Return	YTD Return
US HY	717	11	-26	8.53	0.31%	2.95%
ex-Energy	630	7	-13	7.66	0.48%	3.03%
ex-Materials	699	11	-22	8.36	0.32%	2.64%
ex-E&M	600	6	-7	7.36	0.52%	2.66%

Source: BofA Merrill Lynch Global Research

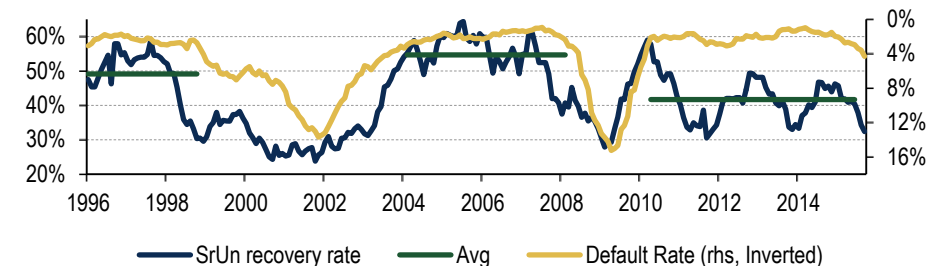
Chart 1: HY EBITDA growth has not supported corporate debt growth this cycle



Source: BofA Merrill Lynch Global Research

However, not only will defaults be higher than in past cycles, but credit losses are also likely to be worse than ever before. That's because recoveries, even outside of the commodity space have been paltry in the post crisis years. Given where we are in the default cycle, prevailing recoveries are a full 10 points lower than where they should be. Chart 2 highlights historical time periods characterized by low default rates (inside of 4%). Whereas in the past, recoveries tended to surpass 50% in low default environments, the last few years have seen those averaging 40%. This is telling because it means the pressure on recoveries is not being caused by the *abundance* of assets for sale in the market, which increases as more companies default, but rather because of the *quality* of these assets as we have discussed in [part 1](#) of our recovery analysis published last year.

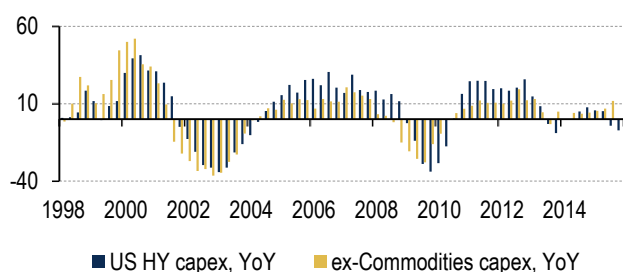
Chart 2: Historically, avg recoveries given low defaults have been higher



Source: BofA Merrill Lynch Global Research, Moody's

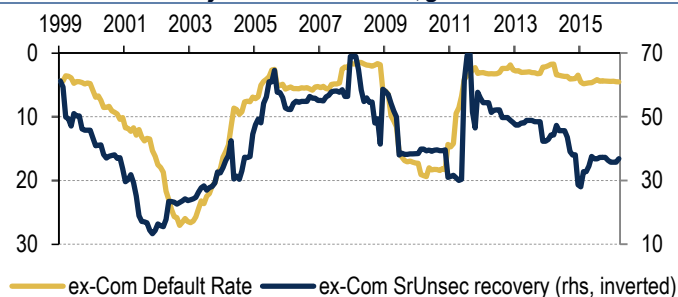
So why are today's assets garnering less enthusiasm than before? One reason, of course, is that a large portion of defaults today are in the commodity space, which are finishing with sub 10% recoveries as investors try to grapple with a market which may not have hit its bottom. However, problems persist even outside of the commodity industries. Take a look at the YoY growth in capex for non-commodity HY issuers (Chart 3). It's striking how CEOs have invested much less in their businesses this cycle compared to previous ones. In fact, most of the capex growth since 2010 has come from energy issuers on the back of the US energy independence story in the early part of the decade; and we all know not to count on that going forward. On top of that, [asset impairments](#) as a percentage of tangible assets are through the roof, chipping away at valuations of an already low asset base. Not surprisingly, non-commodity recoveries reflect the same extent of erosion post 2010 as does overall HY (Chart 4).

Chart 3: CEOs have not been investing in their businesses this cycle



Source: BofA Merrill Lynch Global Research

Chart 4: ex-Commodity recoveries are lower, given current default rates



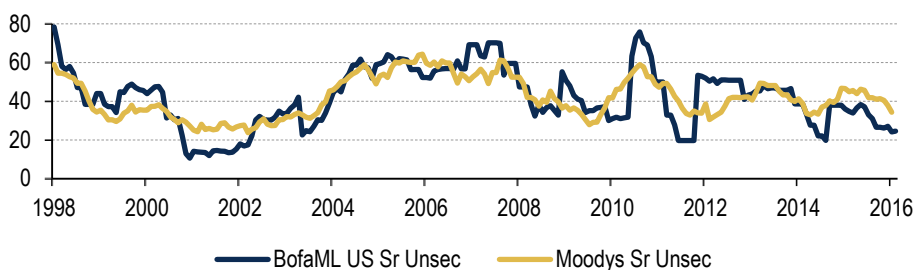
Source: BofA Merrill Lynch Global Research

Recovery model

Given that HY companies have seen hardly any organic growth within last few years, it is of little surprise that recoveries today are so low. The bad news is that we think they are going to decline further.

In this section we introduce a recovery model to determine the extent to which recoveries can decline as we weather the default cycle. We try to explain historically experienced index recoveries (i.e. those that we have collected for the defaults within our US HY index) as a function of other observable variables. Our recoveries are weighted by the amount of debt defaulted, and represent “30-day recoveries” i.e. prices observed approximately a month post default. Chart 5 shows the high correlation between our index recoveries and that of Moody’s which is over a larger universe.

Chart 5: Weighted LTM recoveries, BofaML vs Moody’s



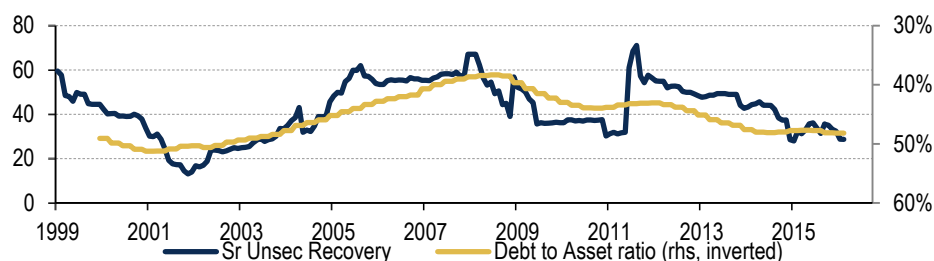
Source: BofA Merrill Lynch Global Research, Moody’s

According to our analysis, the two most important, measurable factors that affect recoveries are the level of default rates and the debt-to-asset ratio of HY issuers. This makes intuitive sense because the former dictates supply of assets in bankruptcy, while the latter dictates the size of the pie the recovered monies have to be spread over. We find that in a simple regression model, these two factors explain 75% of the variation in observed recoveries over two years. We use a two-year time frame because recoveries that we track as part of our US HY index are relatively volatile over an annual time frame (due to the smaller universe) and an extended time horizon smooths intense digressions to reveal the true direction of the dependent variable (recovery) more clearly. While we discussed other factors in [Part 1](#) of this series, subordination, real rates in the US, equity market valuations, etc., we find that a combination of the above two factors offers the best compromise between the explanatory power of the model and the degrees of freedom that it has. Besides real rates is already an input to determining the level of default rates, and thus is included in the model by extension.

While on the surface recoveries might appear to be tied more closely to default rates, debt-to-asset ratios are equally important (Chart 6). While the level of default rates could explain a reasonable amount of variation pre 2010 (70%), it failed to explain almost any variation post crises (10%) when recoveries began a secular decline despite low defaults. This is where the debt-to-asset ratio comes in because it explains how the

enormous amounts of debt issued by companies this cycle has failed to raise the value of their assets as hardly any of the releveraging has gone towards processes that actually raise asset quality.

Chart 6: Debt to asset ratios are strongly correlated with recovery rates



Source: BofA Merrill Lynch Global Research

So where does this leave us? According to our model, should the default cycle look similar to the 1999 experience (2yr cumulative DR of 25%), and debt-to-asset ratio touch the highs of that cycle (0.51x), recoveries can be as low as 16c on the dollar. There is also a case to made that if there is no catalyst to total capitulation, and we see a longer flatter default cycle, we could see 2yr cumulative default rates much less than 25%. While this is reasonable, one can also argue that debt-to-asset ratio which today already stands at 0.48x, could ultimately go much further past 0.51x. Additionally, as we have seen in the post crisis years, default rates matter less than debt-to-asset ratios, meaning recoveries even under a rolling blackout scenario could even be worse than we expect. Table 3 presents a scenario analysis of the range of recoveries to expect in the next few years depending on one's forecast of default rates and debt-to-asset ratios. In almost any scenario recovery rates stand to be well below 30% this cycle.

Table 3: Recoveries for various combinations of independent variables

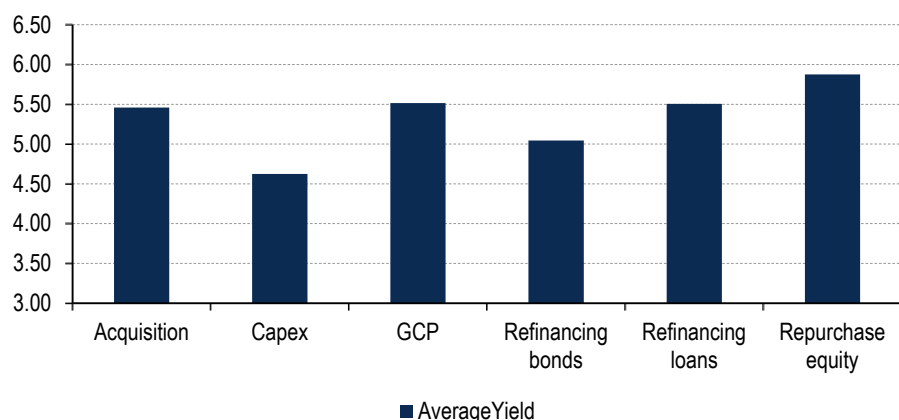
		Debt-to-asset Ratio (x)					
Default Rate (%)		0.48	0.49	0.5	0.51	0.52	0.53
	15.0	31.2	29.4	27.7	26.0	24.2	22.5
	17.5	28.9	27.1	25.4	23.7	21.9	20.2
	20.0	26.6	24.8	23.1	21.4	19.6	17.9
	22.5	24.3	22.5	20.8	19.0	17.3	15.6
	25.0	21.9	20.2	18.5	16.7	15.0	13.3

Source: BofA Merrill Lynch Global Research

While most investors we have talked to appreciate that recoveries will be lower going forward, we think it's just as important to highlight just how much. Because, 8% yield may sound attractive if your expected credit losses are 400bps (6% DR*70% LGD). But the picture suddenly becomes unappealing knowing these losses could accumulate to 500bps; suddenly leaving you with an unremarkable excess spread cushion.

And it appears that investors have begun to pay attention, at least as seen from the events in the primary market. It's no surprise that CCC issuance has cratered in the last year as investors are unwilling to extend credit to low quality issuers. Now it seems they are even rewarding BB issuers for using their newly raised debt judiciously, as can be seen from the lower clearing yields for debt being earmarked for capex investment over anything else (Chart 7).

Chart 7: Average clearing yields for BB issuance, last 6mo



Source: BofA Merrill Lynch Global Research

While, that's a good start, we think there is still a ways to go before investors fully appreciate why there needs to be a paradigm shift in the context of thinking about valuations. We can no longer depend solely on yield/spread levels, and there is no magic excess-spread number which screams "buy". Instead, this new world will be one where investors should and will adjust their expected compensation higher to make up for rising defaults, dwindling recoveries, and declining liquidity, all of which are here to stay.

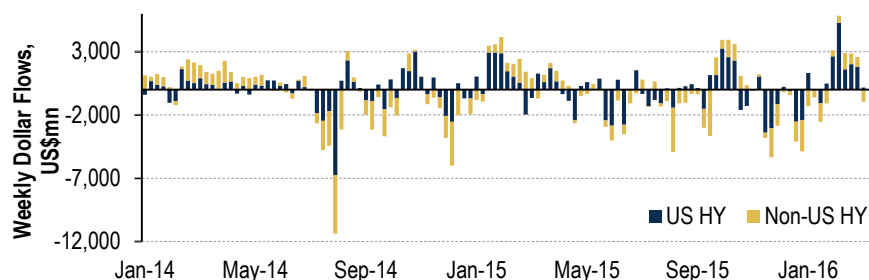
Flows

This is an excerpt from our recently published report: [The High Yield Flow Report: HY flows moderate 31 March 2016](#)

US HY fund flows stabilized from their record breaking +\$13.3bn over the past 5 weeks, though the asset class still managed to gain a net +\$172mn (+0.08%) this past week. Although the inflows are losing steam, Yellen's dovish commentary in the beginning of the week managed to provide a tailwind for risk assets and helped carry high yield to its 7th consecutive inflow. In terms of %AUM, the inflows were evenly split between ETFs (+\$47mn, +0.1%) and non-ETFs (+\$124mn, +0.1%). On the other hand, non-US HY was not as fortunate, as the asset class lost -\$953mn (-0.38%) for its 1st weekly outflow in 6 sessions. Investment grade fund flows moderated as well with a +\$1.18mn (+0.1%) net inflow, down from the previous 3 weeks' \$2bn+ numbers. February's record pace of money into risk assets was obviously not sustainable for an extended period, and it appears retail is becoming fatigued as fund flows moderate to more typical levels.

Other asset classes reporting fund flows include loans (-\$238mn, -0.3%), EM debt (+\$385mn, +0.1%), money markets (+\$10.36bn, +0.4%), and munis (+\$655mn, +0.2%). Commodities lost \$265mn (-0.36%), the asset class' first outflow in 13 weeks. As a whole, fixed income funds gained +\$1.26bn (+0.1%) last week. This compares with equities, which recognized a negligible -\$436mn (-0.0%) net outflow.

Chart 8: Global HY flows distributed between US-domiciled and non US-domiciled funds



Source: BofA Merrill Lynch Global Research, EPFR Global

New Issue Roundup

Bonds

High yield issuance continued to gain momentum last week with \$8.2bn coming to market, led by a \$5.2bn megadeal from Western Digital Technologies for the largest pricing since Frontier Communications' \$6.6bn in September 2015. March concluded with \$21.95bn in DM HY issuance and—although this is not above historical averages—is more than each of the past 3 months combined. Thanks to one of the slowest starts to the year on record, high yield issuance remains 55% below last year's pace. And with Q1 in the books and only \$34.7bn priced from the United States, if the current pace continues we will conclude 2016 with less than \$140bn in new issuance for the smallest dollar amount since 2008. While this is not our base case, the exceptionally slow 1st quarter will likely prove a difficult hurdle to overcome for gross 2016 issuance.

The highlight of last week was a \$5.2bn two-part offering from Western Digital Technologies on March 30th. Though downsized from originally announced levels, this was still the biggest deal of the year so far and the largest since Frontier Communications' \$6.6bn back in September 2015. The transaction included a \$1.875bn tranche of split-rated seven year, senior secured notes that priced at par to yield 7.375%. Meanwhile, the larger, \$3.35bn tranche is made up of 8 year senior unsecured notes (Ba2/BB+) that yield 10.5%. Proceeds will be used to help fund the acquisition of SanDisk Corp, as well as to refinance existing debt.

Table 4: DM issuance summary (\$bn)

	DM	United States	Europe	BB	B	CCC/NR
WTD Apr 01	8.2	8.2	0.0	6.2	1.1	1.0
Wk Mar 25	5.8	4.1	1.7	2.5	3.3	0.0
Wk Mar 18	3.2	3.0	0.2	0.8	2.0	0.4
Wk Mar 11	2.8	2.8	0.0	0.9	1.9	0.0
MTD Mar	22.0	20.1	1.8	12.4	8.2	1.4
February	10.1	9.4	0.8	3.7	3.7	2.7
January	5.7	5.2	0.2	3.6	1.8	0.3
December	6.0	5.0	0.6	4.0	2.0	0.0
YTD 2016	37.7	34.7	2.8	19.7	13.7	4.4
YTD 2015	113.5	77.0	32.0	41.6	58.6	13.3
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 5: High yield new issues, March 28th – April 1st

Pricing Dt	Name	Size (\$)	Snr	Cpn	Maturity	Price	Yield	Moody's	S&P	Type	Sector	Region
3/31/2016	Zayo Group LLC	550	Sr Nts	6.38	5/15/2025	97.76	6.71	Caa1	B-	144A w/RR	Internet	United States
3/30/2016	Western Digital Technologies Inc	3350	Sr Nts	10.50	4/1/2024	100.00	10.50	Ba2	BB+	144A w/RR	Computers	United States
3/30/2016	Western Digital Technologies Inc	1875	Sr Sec Nts	7.38	4/1/2023	100.00	7.38	Ba1	BBB-	144A w/RR	Computers	United States
3/29/2016	T-mobile Usa, Inc.	1000	Sr Nts	6.00	4/15/2024	100.00	6.00	Ba3	BB	144A w/RR	Telecommunications	United States
3/29/2016	Greystar Real Estate Partners LLC	70	Sr Sec Nts	8.25	12/1/2022	102.25	7.66	B2	BB-	144A w/RR	Real Estate	United States
3/28/2016	Surgery Partners	400	Sr Nts	8.88	4/15/2021	100.00	8.88	Caa2	CCC+	144A w/RR	Healthcare-Services	United States
3/28/2016	HD Supply Inc	1000	Sr Nts	5.75	4/15/2024	100.00	5.75	B3	B	144A w/RR	Distribution/Wholesale	United States

Source: BofA Merrill Lynch Global Research

Also coming to market last week was T-Mobile USA, which brought \$1bn worth of 8 year senior notes yielding 6%. According to Prospect News, the deal was 4x oversubscribed and thus printed at the tight end of price talk. The wireless communications provider plans to use the proceeds in order to purchase 700MHz A-block spectrum and other spectrum purchases.

Table 6: 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
12/4/2015	5,196	3,515	1,681			3,600	1,165	431		431	4,765		5,196		
12/11/2015	791	462	329			225	566			566	225		791		
1/8/2016	450		450			450					450		450		
1/15/2016	512		512			350	162				512		512		
1/22/2016	1,300	775	525			1,300					1,300		525	775	
1/29/2016	3,400	2,800	300	300		3,400				300	3,100		3,400		
2/5/2016	4,283	735	2,792	756		3,515	768			1,011	3,271		4,283		
2/12/2016	260		260			260				260			260		
2/19/2016	1,850	1,500	350			1,850					1,850		350	1,000	500
2/26/2016	2,000	1,500	250	250		2,000					2,000		500		1,500
3/4/2016	3,705	1,975		1,730		3,705				1,500	2,205		2,205		1,500
3/11/2016	2,825	900	1,925			2,825				900	1,925		1,925	900	
3/18/2016	3,156	750	1,966	440		2,990	166			166	2,990		1,891	440	825
3/25/2016	5,750	2,500	3,250			5,750				2,225	3,525		2,975		2,775
4/1/2016	8,245	6,225	1,070	950		8,245				1,945	6,300		8,245		

Source: BofA Merrill Lynch Global Research

Loans

Global loan issuance saw a pickup as well last week with \$4.1bn priced compared to just \$2.1bn the week prior. \$1.8bn was rated double-B, while \$2.1 was single-B rated and the remaining \$200mn triple-C. March concluded with \$16.6bn in new loan supply, a welcome pickup from February's \$8.6bn and the largest amount since October 2015's \$17.2bn. The 1st quarter saw \$41bn in primary loan activity out of the United States, roughly in line with last year's \$46.6bn at this point. If the current pace continues for the remainder of 2016, we can expect to see \$164bn priced on the year, the smallest amount since 2010.

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

	Global	BB	B	CCC/NR	Cov lite	2nd lien
WTD Apr 01	4.1	1.8	2.1	0.2	0.7	0.7
Wk Mar 25	2.1	1.7	0.4	0.0	1.4	1.4
Wk Mar 18	7.4	6.2	1.1	0.0	5.5	5.5
Wk Mar 11	0.1	0.0	0.1	0.0	0.0	0.0
MTD Mar	16.6	12.0	4.4	0.2	9.8	9.8
February	8.6	5.0	3.6	0.1	3.5	3.5
January	15.7	6.3	9.0	0.5	11.4	11.4
December	6.6	4.8	1.7	0.1	5.8	5.8
YTD 2016	41.0	23.2	17.0	0.8	24.7	24.7
YTD 2015	59.9	28.1	28.6	3.2	37.2	37.2
2015	257.9	119.6	127.2	11.0	186.4	186.4
2014	379.4	109.5	218.3	51.6	267.1	267.1
2013	454.9	152.8	261.7	40.4	279.1	279.1

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

Table 8: New issue breakdown by month, last 3 months

	Total	Ratings					TLb	2nd Lien	Cov Lite
		BB	B	CCC	NR				
12/11/2015	490	100	390				465	25	380
12/18/2015	0	0					0		
1/8/2016	5,800	1,035	4,265	500		5,300	500	4,765	
1/15/2016	3,810	1,600	2,210			3,810		2,645	
1/22/2016	2,225	2,035	190			2,225		2,035	
1/29/2016	3,905	1,605	2,300			3,905		1,930	
2/5/2016	1752	1189	478	85		1667	85		
2/12/2016	2,483	0	2,483			2,483		2,015	
2/19/2016	990	675	315			990		165	
2/26/2016	1,925	1,600	325			1,925		1,350	
3/4/2016	4,450	3,700	750			4,450		2,200	
3/11/2016	100	0	100	0		100			
3/18/2016	7,394	6,249	1,105	40		7,354	40	5,480	
3/25/2016	2,095	1,745	350			2,095		1,395	
4/1/2016	4,090	1760	2,140	190		3,855	190	735	

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

Of note, eResearch Technology Inc offered a 2-part \$540mn deal on March 30th with proceeds being used to help finance the leveraged buyout by Nordic Capital. The \$495mn 7-year 1st lien term loan is covenant lite, with price talk in the L+450bp context. The remaining \$45mn from the deal consists of a revolving credit facility. Also coming to market in the loan space last week was Quorum health Corporation, which offered a \$880mn B2-rated term loan on March 30th. Proceeds will be used to help fund the company's spinoff from Community Health Systems which was first announced in August 2015.

Table 9: 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
3/30/2016	eResearch Technology Inc	eResearch Technology (RC 4/16)	45	45	NR	NR	No	No	LBO	Computers & Electronics	United States
3/30/2016	eResearch Technology Inc	eResearch Technology (TL 4/16)	495	495	NR	NR	No	Yes	LBO	Computers & Electronics	United States
3/30/2016	Evoqua Water Technologies	Evoqua (Add-on 4/16)	185	185	B2	B+	No	Yes	Acquisition	Computers & Electronics	United States
3/30/2016	North American Partners in Anesthesia	NAPA (4/16)	360	320	NR	NR	No	No	LBO	Healthcare	United States

Table 9: 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
3/30/2016	Pinnacle Entertainment Inc	Pinnacle Entertainment (TL 4/16)	350	350	Ba1	BB+	No	No	Refinancing	Gaming & Hotel	United States
3/30/2016	Precyse Solutions LLC	Precyse Healthcare (2nd Lien 4/16)	190	190	Caa2	CCC+	No	No	Acquisition	Services & Leasing	United States
3/30/2016	Precyse Solutions LLC	Precyse Healthcare (4/16)	510	460	B2	B+	No	No	Acquisition	Services & Leasing	United States
3/30/2016	Premiere Global Services Inc	Premiere Global (4/16)	600	550	NR	NR	No	No	LBO	Services & Leasing	United States
3/29/2016	Quorum Health Corporation	Quorum Health (4/16)	980	880	B1	B	No	No	Acquisition	Healthcare	United States
3/29/2016	Alvogen Pharma US Inc	Alvogen Pharma (Add-on 4/16)	55	55	B3	B	No	Yes	Acquisition	Healthcare	United States
3/29/2016	Alvogen Pharma US Inc	Alvogen Pharma (Add-on 4/16)	55	55	B3	B	No	Yes	Acquisition	Healthcare	United States

Source: BofA Merrill Lynch Global Research

Performance Summary

Dovish commentary from Yellen & Co at the beginning of last week helped all major asset classes deliver positive week-over-week total returns. US and EM equities outperformed, which gained 1.81% and 1.55% respectively (Table 10). TIPs (+1.30%) were also among the week's top performers off the back of a 6bp increase in the 5yr breakeven inflation rate. US HY was towards the bottom of the performance stack, though still gained +0.34%. Meanwhile, investment grade corporates were up +0.75% for the 6th best weekly return.

Within HY, risk outperformed though all 3 ratings buckets finished in the green (Chart 9). Triple Cs finished 0.60% higher, followed by single-Bs (+0.35%) and lastly double-Bs (+0.26%). All investment grade rating buckets outperformed their high yield counterparts with each bucket finishing between 0.65% and 0.85% higher. As a whole, investment grade gained 0.75% compared to just a +0.34% total return for high yield.

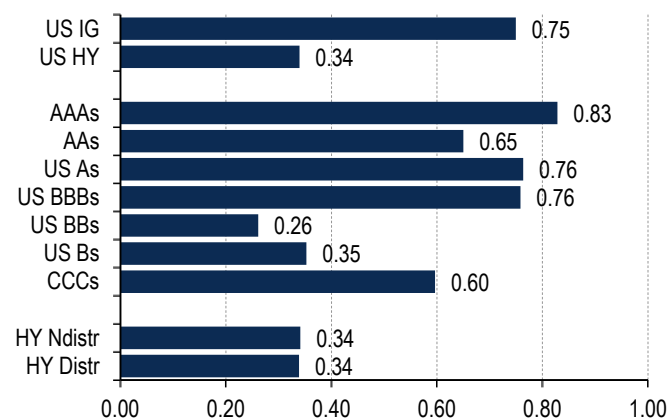
All but 1 of our high yield credit strategy sectors finished with positive returns last week, the lone outlier being Energy (-0.84%). Materials (+0.18%) also underperformed on the week, though the two commodities related sectors have seen the greatest spread tightening since the rally began on February 11th. Commercial Services (+0.90%) was last week's best performing sector, followed by Gaming (+0.86%) and Retail (+0.79%). In general, consumer-driven sectors outperformed following upward GDP revisions that were driven by a stronger than initially reported consumer.

Table 10: Total returns across asset classes

Ticker	Name	WOW (%)	MTD (%)	YTD (%)
LCDI/ALL	Lev Loans	0.19	0.04	1.59
CDXIG	CDX.IG	0.25	0.00	0.42
HE00	EU HY	0.27	0.07	1.84
H0A0	US HY	0.34	-0.01	3.23
M0A0	Mortgages	0.42	0.01	1.97
U0A0	Municipals	0.46	0.05	1.69
EMGB	EM Govts	0.57	0.13	4.61
EMIB	EM IG	0.61	-0.04	3.54
GA05	5yr TRSY	0.72	-0.09	2.84
C0A0	US IG	0.75	0.00	3.92
EMHB	EM HY	0.99	0.09	4.53
CDXHY	CDX.HY	1.13	0.00	3.12
G0QI	TIPs	1.30	-0.12	4.56
MXEF	EM Eqty	1.55	-1.27	4.04
SPX	S&P 500	1.81	0.63	1.41

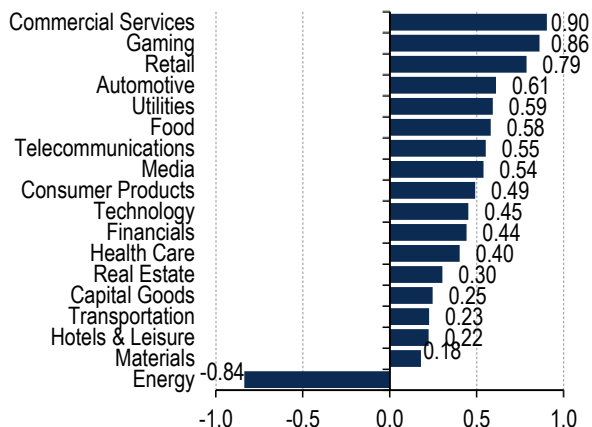
Source: BofA Merrill Lynch Global Research

Chart 9: Segment and rating returns, week-on-week (WoW)



Source: BofA Merrill Lynch Global Research

Chart 10: Sector returns, week-on-week (WoW)



Source: BofA Merrill Lynch Global Research

Top performers

The SSE 6 ⁵/₈'s were last week's best performing bond with a 18.1% price jump. The BCEI 5 ³/₄'s (+8.7%) and the 6 ³/₄'s (+7.2%) were also among the top performers after the company announced employee cuts and the departure of their CFO in a reorganization process. Also making their way onto the leaderboard were the SVR 9 ¹/₈'s, which were up 7.1% following the company announced Q4 earnings results that were in line with analyst expectations (Table 11).

Table 11: Top 10 performers, March 24th – March 31st

Issue	Rating	Price	Yield	ZSpread	Px Change	Pct Change	Volume
SSE 6.63 '19	CC	29.55	51.46	5042	4.5	18.1	6
BCEI 5.75 '23	CCC1	27.17	33.46	3213	2.2	8.7	8
BCEI 6.75 '21	CCC1	28.13	42.33	4115	1.9	7.2	9
SVR 9.13 '19	CCC2	46.13	44.84	4385	3.1	7.1	8
BTU 6 '18	CC	7.10	172.02	17084	0.5	6.8	17
TCKBCN 6.25 '41	B1	57.91	11.33	948	2.8	5.0	12
NAV 8.25 '21	CCC2	74.63	15.15	1390	3.0	4.2	11
HELI 9.25 '20	B2	42.59	35.74	3461	1.7	4.2	19
X 6.05 '17	B2	97.93	7.95	719	3.4	3.6	13
FCX 5.45 '43	BB2	61.02	9.48	757	2.0	3.3	16

Source: BofA Merrill Lynch Global Research

Bottom performers

8 out of last weeks' 10 worst performers came from the Energy space, led by the LINE 6 ¹/₂'s which fell 7.6%. Also underperforming were the WLL 5 ³/₄'s (-4.7%), the WPX 5 ¹/₄'s (-3.8%), and the WLL 6 ¹/₂'s (-3.7%). Energy bonds were last week's worst performing sector with a 0.84% drop as concerns over gas prices continue to loom over the heads of investors. The MU 5 ¹/₂'s (-3.0%) were the only non-Commodity related bond to make it into the bottom 10 list, which dropped 2.6pts after the memory chipmaker announced a 30% revenue decline impacted by continued weakness in the PC market.

Table 12: Bottom 10 performers, March 24th – March 31st

Issue	Rating	Price	Yield	ZSpread	Px Change	Pct Change	Volume
LINE 6.5 '19	CC	10.83	116.85	11591	-0.9	-7.6	26
WLL 5.75 '21	CCC1	66.79	15.64	1448	-3.3	-4.7	55
WPX 5.25 '24	B1	68.49	11.09	961	-2.7	-3.8	7
WLL 6.25 '23	CCC1	67.28	13.66	1229	-2.6	-3.7	18
CNX 5.88 '22	B2	72.50	12.50	1119	-2.7	-3.6	19
MU 5.5 '25	BB3	81.80	0.00	693	-2.6	-3.0	17
CLR 3.8 '24	BB2	80.06	7.06	557	-2.1	-2.6	23
LPI 6.25 '23	B3	83.90	9.46	810	-2.1	-2.4	7
LINE 7.75 '21	CC	11.61	87.17	8600	-0.3	-2.3	12
WMB 4.55 '24	BB1	76.28	8.64	715	-1.7	-2.2	28

Source: BofA Merrill Lynch Global Research

Rating Actions

Last week we saw 16 downgrades and 12 upgrades on high yield issuers, as well as 1 default. S&P lowered their issuer credit rating of SouthCross Holdings Borrower LP to D after the company filed for bankruptcy protection in Texas. The proposed restructuring would cut the company's bank debt by \$480mn and add \$170mn in cash, a much needed lifeline to a company that has suffered from the low gas price environment.

On upgrades, S&P raised their corporate credit rating on J.C. Penney Co. Inc. to B from CCC+, with a positive outlook. The upgrade was based on the rating agency's view that JCP's turnaround efforts under new leadership are sustainable, despite a challenging US department store environment. Also receiving an upgraded credit rating last week was HD Supply, who was raised to BB- from B+ based on the company's improved credit metrics over the past year. Because of improving EBITDA, the company's net leverage stood at 4.6x as of January 31st, levels S&P considers to be 'aggressive' as opposed to the previous 'highly leveraged' financial risk profile.

Meanwhile, Valeant Pharmaceuticals International was downgraded to B3 by Moody's from a previous B2 rating, with approximately \$32bn of debt affected. According to the rating agency, the downgrade reflects a combination of operating headwinds, CEO and Board changes occurring at a time of elevated financial leverage, and regulatory scrutiny. The current B2 corporate family rating remains under review for further downgrades.

Table 13: Ratings actions on high yield issuers, March 25th – April 1st

Date	Action	Company Name	Rating Type	Agency	Curr Rtg	Last Rtg
04/01/2016	Upgrade	PRA Health Sciences Inc	LT Local Issuer Credit	S&P	BB-	B+
03/31/2016	Upgrade	Hughes Satellite Systems Corp	LT Local Issuer Credit	S&P	BB	BB-
03/30/2016	Upgrade	JC Penney Co Inc	LT Local Issuer Credit	S&P	B	CCC+ *
03/25/2016	Upgrade	Albertson's Holdings LLC	LT Local Issuer Credit	S&P	B+	B *
03/25/2016	Upgrade	Albertsons LLC	LT Local Issuer Credit	S&P	B+	B *
03/25/2016	Upgrade	HD Supply Inc	LT Local Issuer Credit	S&P	BB-	B+
03/25/2016	Upgrade	New Albertsons Inc	LT Local Issuer Credit	S&P	B+	B- *
03/25/2016	Upgrade	Safeway Inc	LT Local Issuer Credit	S&P	B+	B *
04/01/2016	Upgrade	CrownRock LP	Senior Unsecured Debt	Moody's	B3	Caa1 *
04/01/2016	Upgrade	Zayo Group LLC	Senior Unsecured Debt	Moody's	B3	Caa1
03/29/2016	Upgrade	ADS Tactical Inc	Senior Secured Debt	Moody's	B3	Caa1

Table 13: Ratings actions on high yield issuers, March 25th – April 1st

Date	Action	Company Name	Rating Type	Agency	Curr Rtg	Last Rtg
03/28/2016	Upgrade	HD Supply Inc	Senior Unsecured Debt	Moody's	B3	Caa1
04/01/2016	Initiated	MGM Growth Properties LLC	LT Local Issuer Credit	S&P	B+	
03/30/2016	Initiated	Nmsc Holdings Inc	LT Local Issuer Credit	S&P	B	
03/30/2016	Initiated	Precyse Acquisition Corp	LT Local Issuer Credit	S&P	B	
03/29/2016	Initiated	Frank Russell Co	LT Local Issuer Credit	S&P	BB	
03/29/2016	Initiated	Russell Investment Group Federal PAC	LT Local Issuer Credit	S&P	BB	
03/29/2016	Initiated	TruGreen LP	LT Local Issuer Credit	S&P	B	
03/25/2016	Initiated	Albertsons Cos LLC	LT Local Issuer Credit	S&P	B+	
03/30/2016	Initiated	Diebold Inc	Senior Unsecured Debt	Moody's	B2	
03/30/2016	Dropped	CIFC Corp	LT Local Issuer Credit	S&P	NR	BB-
03/30/2016	Dropped	eResearchTechnology Inc	LT Local Issuer Credit	S&P	NR	B
03/30/2016	Dropped	Nebraska Book Holdings Inc	LT Local Issuer Credit	S&P	NR	CC
03/25/2016	Dropped	MedAssets Inc	LT Local Issuer Credit	S&P	NR	B
03/29/2016	Dropped	Denver Parent Corp	Senior Unsecured Debt	Moody's	WR	C
03/29/2016	Dropped	Venoco Inc	Senior Unsecured Debt	Moody's	WR	Ca
03/29/2016	Downgrade	US Silica Co	LT Local Issuer Credit	S&P	B	BB-
03/31/2016	Downgrade	Logan's Roadhouse Inc	LT Local Issuer Credit	S&P	CCC- *	CCC+
03/29/2016	Downgrade	Nebraska Book Holdings Inc	LT Local Issuer Credit	S&P	CC	CCC+
03/25/2016	Downgrade	Emmis Communications Corp	LT Local Issuer Credit	S&P	B-	B
04/01/2016	Downgrade	Clayton Williams Energy Inc	Senior Unsecured Debt	Moody's	Ca	Caa1 *-
03/31/2016	Downgrade	Bowie Resource Partners LLC	Senior Secured Debt	Moody's	B3	B1 *-
03/31/2016	Downgrade	CPI International Inc	Senior Unsecured Debt	Moody's	Caa2	Caa1
03/31/2016	Downgrade	Goodman Networks Inc	Senior Secured Debt	Moody's	Ca	Caa1
03/31/2016	Downgrade	SquareTwo Financial Corp	Senior Secured Debt	Moody's	Ca	Caa3 *-
03/31/2016	Downgrade	Valeant Pharmaceuticals International	Senior Unsecured Debt	Moody's	B3 *-	B2 *-
03/29/2016	Downgrade	Palace Entertainment Holdings LLC	Senior Secured Debt	Moody's	B3	B2
03/29/2016	Downgrade	Targa Pipeline Partners LP	Senior Unsecured Debt	Moody's	Ba3	Ba2
03/28/2016	Downgrade	Breitbart Energy Partners LP	Senior Unsecured Debt	Moody's	Caa3	Caa1 *-
03/28/2016	Downgrade	Caesars Entertainment Resort Properties LLC	Senior Secured Debt	Moody's	B3	B2
03/28/2016	Downgrade	Midcontinent Express Pipeline LLC	Senior Unsecured Debt	Moody's	Ba2	Ba1
03/25/2016	Downgrade	Cumulus Media Holdings Inc	Senior Unsecured Debt	Moody's	Caa3	Caa2
03/28/2016	Default	Southcross Holdings Borrower LP	LT Local Issuer Credit	S&P	D	CC

Source: BofA Merrill Lynch Global Research, Bloomberg

Relative Value

Cash v. CDS

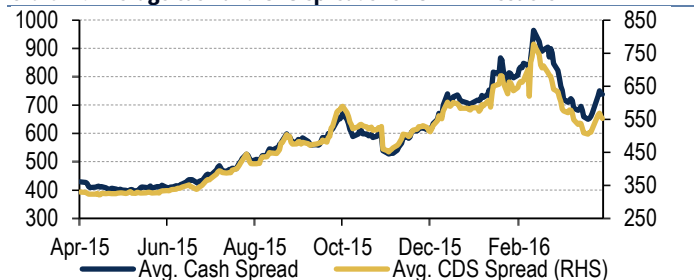
Cash indices underperformed CDX indices over the week (Table 14). CDX HY tightened by 24bp compared to 12bp of widening for our HY cash index. However, due to an [estimated fair value](#) roll of 12bps, a significant portion of the CDX movement can be attributed to constituent changes between series 25 and series 26. The average basis for HY issuers fell by approximately 13bps due to the roll and, with a current value of -186bps, the basis has fallen 4bps since March 28th (Chart 12).

Table 14: CDX vs. ML Cash Indices

Index	Spread	1W-Chng	1M-Chng	3M-Chng
CDX IG	76	-8	-14	-3
HG Cash	169	-4	-33	-4
CDX HY	438	-24	-64	-44
HY Cash	705	12	-41	10

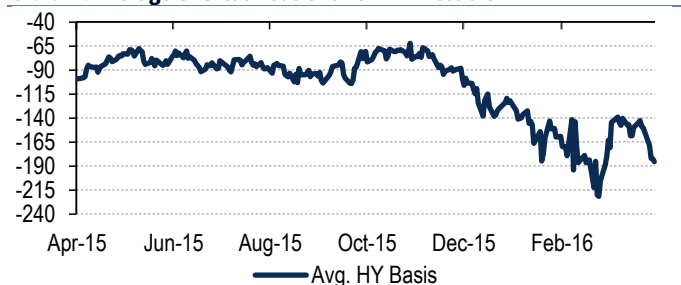
Source: BofAML Global Research, 5y spreads for CDX, OAS for cash

Chart 11: 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 12: 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 tightened on the week, led by a 24bp decline in CDX HY. Although on an absolute level high yield tightened more than investment grade, relative to existing spread levels investment grade outperformed as the HY/IG spread ratio ticked up 81bps to 5.58 (Chart 13). The XO-HY differential fell 22bps and currently stands at -134bps (Chart 14).

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	76	-8	-14	-3	94	0	-12	-2	-18	-7	-2	0
CDX HY	438	-24	-64	-44	489	-3	-72	-53	-51	-21	7	9
iTraxx Main	74	-3	-21	-3	86	1	-18	1	-12	-3	-3	-4
iTraxx XO	306	-15	-65	10	326	-2	-76	-12	-20	-13	11	22

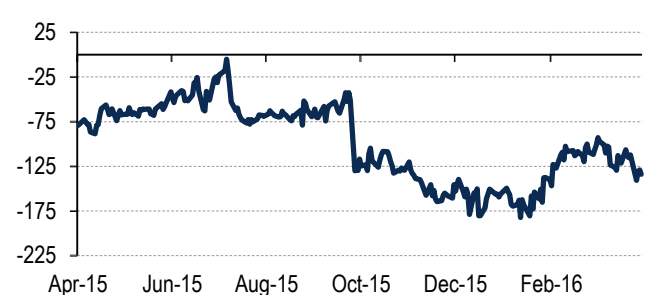
Source: BofA Merrill Lynch Global Research

Chart 13: HY/IG



Source: BofA Merrill Lynch Global Research

Chart 14: XO-HY

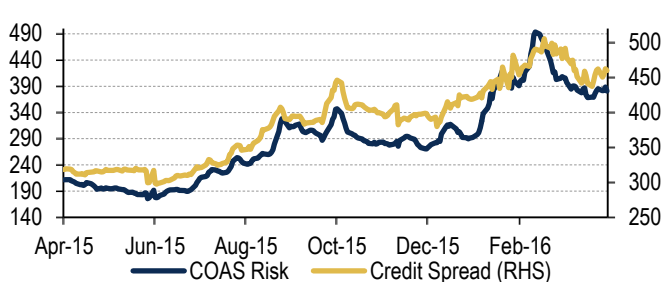


Source: BofA Merrill Lynch Global Research

Credit v. Equities

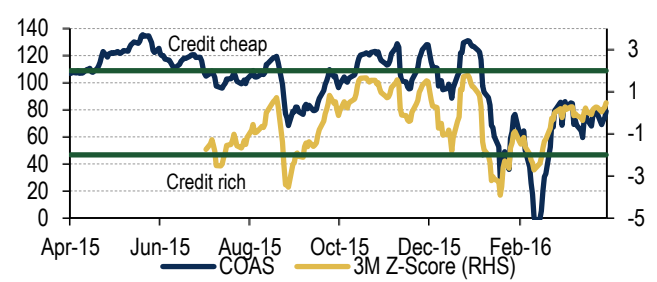
The average spread for our HY universe was unchanged compared to a 1bp decrease in the equity implied credit risk (Chart 15). The US HY COAS value accordingly widened by 1bp and its 3m z-score is now at +0.48, indicating that credit is fairly valued relative to equity implied risk (Chart 16).

Chart 15: US HY COAS Risk vs. Spread



Source: BofA Merrill Lynch Global Research

Chart 16: US HY COAS & Z-Score



Source: BofA Merrill Lynch Global Research

Analyst Certification

I, Michael Contopoulos, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

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Disclosures

Important Disclosures

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Issuer Recommendations: If an issuer credit recommendation is provided, it is applicable to bonds and capital securities of the issuer except bonds and capital securities specifically referenced in the report with a different credit recommendation. Where there is no issuer credit recommendation, only individual bonds and capital securities with specific recommendations are covered. CDS and equity preferreds are rated separately and issuer recommendations do not apply to them.

BofA Merrill Lynch Global Research credit recommendations are assigned using a three-month time horizon:

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