

For beta or worse

■ What's in a name?

Our analysis of spread betas to treasury rates indicates a rather clear demarcation between high grade and high yield; the beta of BBBs and single-As is very similar, while BBs and single-Bs sing the same tune. More interestingly, there is a definite advantage to being called 'high yield', when it comes to rates – a BB at 250bp behaves quite differently from a BBB at the same spread. To some extent, we think this is an artificial construct. What surprised us the most in this analysis was the complete lack of differentiation between BBs and single-Bs when it came to rates sensitivity. We do continue to advocate holding the latter over the former for other reasons, but purely as a refuge from rising rates, single-Bs do not seem to offer better value than the rating above them, over a 3m or 6m horizon.

HY more at risk than HG due to front-end rates volatility

As last week's post-FOMC market action showed, it's the front-end of the treasury curve that is more vulnerable now than the long-end. Indeed, we wouldn't be surprised to see similar moves, where the 5y sells off more than the 10y, repeated a couple of more times over the coming months, in light of unexpectedly good economic data. This doesn't bode well for high yield, where typical portfolio durations are around the 5y point and which tends to be more susceptible to spread widening than high grade when rates volatility increases.

Decompression: BB vs. BBBs, CDX HY vs. CDX IG

The sweet spot for decompression in the cash market is likely to be in the BBB vs. BB bucket. The latter has tightened a lot relative to the former, thanks in part to a bid from traditional high grade investors looking for refuge from duration risk. Even if they prove to be sticky holders, declining to sell existing BB positions when volatility hits, the bid for lower quality paper will certainly be lower than in the past. Series22 of CDX will offer a good entry point for decompression trades, once HY22 starts trading this week. Weakness in the cash market will likely lead to hedging flows in CDX HY, particularly as most investors are unwilling to sell bonds that will be difficult to source once the volatility dies down. And anecdotally, we've seen little inclination from the high yield investor base to hedge interest rate risk, so far.

RV at a glance

CDS indices tightened over the week, with HY underperforming IG and single-names lagging indices. The HG cash curve flattened substantially, with 7-10y 6bp tighter and 1-3y 1bp tighter. European benchmarks outperformed their US counterparts in both equity and credit.

Single-name COAS dislocations

Capital One Financial Corp screens as the richest name in credit relative to its equity, while AES Corp screens as the cheapest issuer to its stocks within our US COAS universe. Among European names, this week's richest name in credit relative to equity is Ahold, while BBVA screens as the cheapest name to its stock.



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[13 Mar 2014: Spring Roll – CDX IG22 update](#)

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Debt-equity RV framework

Our COAS model factors in company leverage, equity volatility and current credit spreads to evaluate a forward-looking measure of Credit Risk. COAS is defined as the difference between market Credit Spread and model implied Credit Risk. For a more complete discussion on our COAS model, please see:

[A debt-equity RV framework, 26 March 2013](#)

For model data on a number of issuers, visit: www.baml.com/coas

What's in a name?

Quantitative easing has disproportionately benefitted high yield over high grade. Each subsequent version led to further spread compression between the two; a result of the epic yield chase that QE fuelled (Chart 1). And so it goes, that as the liquidity spigot is turned off, the indiscriminate beta compression that it bore witness to will stall along with it.

We have generally been in favour of the [decompression argument](#), or at least a more selective compression, where credit picking matters once more. As market conditions normalize, high yield should struggle to tighten in the same proportion as it did over the last few years relative to high grade. With yields in risk-free and high grade securities rising, investors will no longer be obligated to own lower quality, riskier paper in order to outperform. Conventional wisdom, on the other hand, has an equally reasonable argument for further compression. In a rising rate environment, duration sensitive assets will be more vulnerable. High yield credit, with a larger spread cushion to withstand the rise in rates, will be a better place to combat higher treasury yields than high grade. This view has led to a number of traditionally high grade investors venturing into lower quality paper, more than they normally would.

Chart 1: HY/HG OAS – the QE facilitated spread compression



Source: BofA Merrill Lynch Global Research

That which we call BBB, may smell sweeter were it called BB

We do not fundamentally disagree with the 'spread cushion' argument. With spreads fast approaching cyclical tightness though, we did wonder if the value of this cushion was diminishing. To analyse this, we looked at the spread beta to treasury rates offered by different rating buckets. Perhaps not surprisingly, there is a rather clear demarcation between high grade and high yield; the beta of BBBs and single-As is very similar, while BBs and single-Bs sing the same tune. What is more interesting to us is that what you're called seems to matter more than what you offer i.e. a BB at 250bp behaves quite differently from a BBB at the same spread. To some extent, we think this is an artificial construct. Of course, circumstances change and times when BBB traded at 250bp were quite different from today, but charts in the following pages will reveal that there is a definite advantage to being called 'high yield', when it comes to rates.

That which we call BB, may be no different than B

What surprised us the most in this analysis was the complete lack of differentiation between BBs and single-Bs when it came to rates sensitivity. We do continue to advocate holding the latter over the former as we elaborate below, but just purely as a refuge from rising rates, single-Bs do not seem to offer better value than the rating above them, over a 3m or 6m horizon.

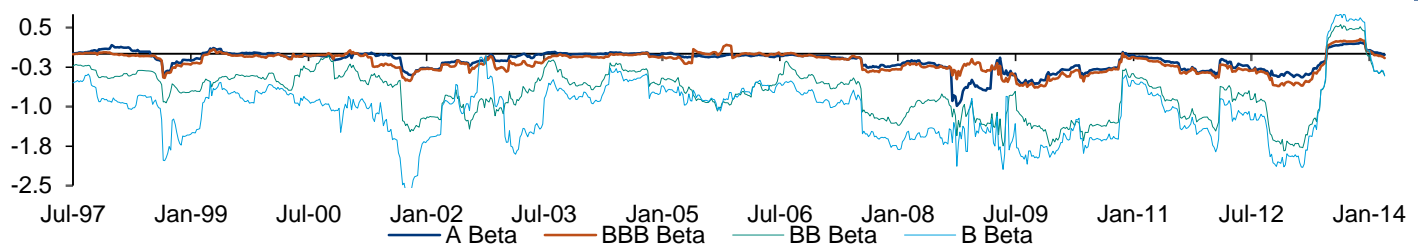
For beta or worse

The question we tried to answer when we began our beta analysis was this: does the rate sensitivity of high yield and particularly BB paper diminish as spreads tighten i.e. do they tighten less into a rate increase? And if so, at what point does the trade-off between spread cushion to rates and quality start leaning towards the latter? The spread compression between BBs and BBBs had us thinking that we were quite close to this point. Our analysis however revealed some surprises.

The great HY-HG divide

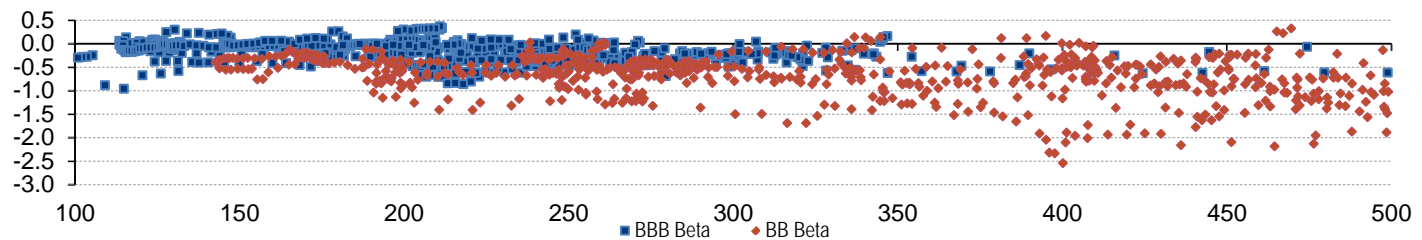
To measure interest rate sensitivity across different credit ratings, we calculated a six month beta of weekly spread changes to weekly changes in the 5y¹ Treasury rate. The first thing that jumps out of Chart 2 is the clear demarcation between the high-grade and high-yield rating buckets. In general, for a given spread level, BBs realize more spread tightening into a rate rise than BBBs (Chart 3), a differentiation that seems absent between BBs and single-Bs (Chart 4).

Chart 2: Spread beta to 5y treasury, by rating



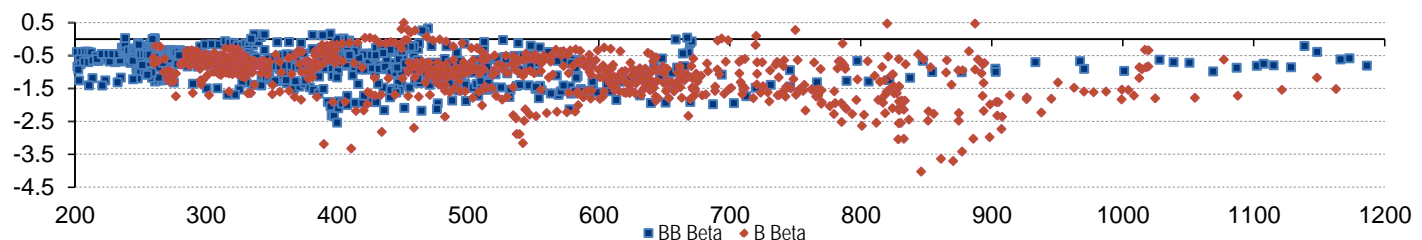
Source: BofA Merrill Lynch Global Research

Chart 3: BBB and BB spread betas to 5y treasury versus the average spread for the period



Source: BofA Merrill Lynch Global Research

Chart 4: BB and B spread betas to 5y treasury versus the average spread for the period



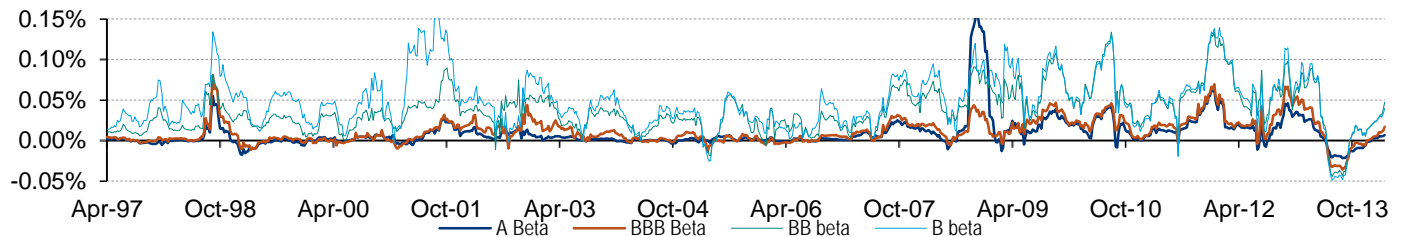
Source: BofA Merrill Lynch Global Research

¹ We also analysed betas to the 10y rate, given that high grade investors are more sensitive to this part of the curve. This did not make any material changes to our conclusions.

When one B is worth just as much as two

The other interesting thing illustrated in Chart 2 is the diminishing difference between BBs and single-Bs. While in the past single-Bs certainly offered more spread tightening against rising rates than BBs, the difference between the two is far less discerning now. The lines get blurrier the shorter the time-horizon. For example, on a 3m basis the beta realised by BBs is virtually identical to that of single-Bs. Chart 5 shows the 3m beta of weekly excess returns of each rating category to changes in the 5y treasury yield. Quite clearly, purely as arsenal against rising rates, single-Bs don't necessarily perform any better than BBs now.

Chart 5: Beta of excess return to 5y treasury rate

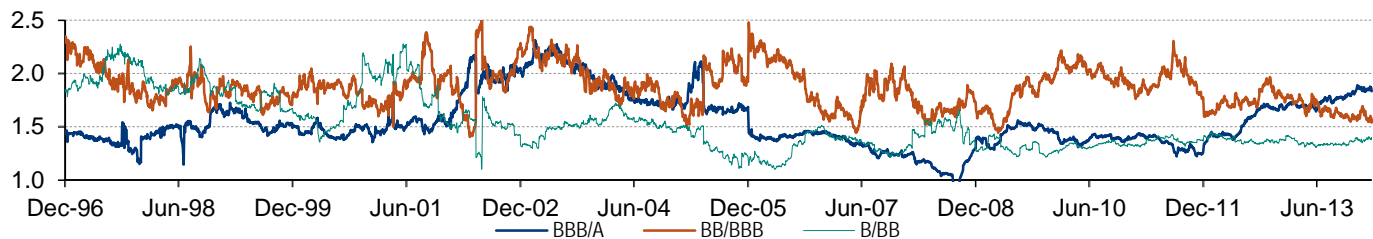


Source: BofA Merrill Lynch Global Research

A case for selective decompression

Within the rating buckets, the group that seems to have compressed the most relative to the others is BBs. Chart 6 shows the spread ratio between each rating and the one right above it. The BBB/A ratio has been drifting up for a while now, indicating that single-As are tightening more in proportion to BBBs. At the same time, the B/BB ratio hasn't moved all that much over the last year, although the spread differential has been shrinking. This is quite interesting in light of the BB/BBB ratio, which has risen steadily since 2012. In fact, outside of a couple of short-lived instances back in 2003-05, this ratio has never exceeded the BBB/A ratio as it does today. A proportion of this BB/BBB compression we think is a result of high grade investors dipping into higher quality high yield paper as a duration hedge.

Chart 6: Spread ratios between different rating buckets



Source: BofA Merrill Lynch Global Research

Our beta analysis in the previous section does show that historically, BB paper offers a better place to be over BBB paper as rates rise. We do think however that we are at the point where the trade-off between spread cushion and quality will start leaning towards the latter.

As goes rates volatility, so go spread ratios

As Wednesday's market action showed, it's the [front-end of the treasury curve](#) that is far more vulnerable now than the long-end. The threshold for reducing the pace of QE tapering or even pausing is very high. This leaves the 10y treasury

yield, which tends to be the one high-grade investors worry about more, relatively well anchored. At the same time, speculation about the path of the Fed Funds rate and the Fed's first rate hike will lead to more volatility in the 5y. Indeed, we wouldn't be surprised to see Wednesday-like moves when the 5y widened by 18bp and the 10y by 8bp, repeated a couple of more times over the coming months, in light of unexpectedly good economic data. And the 5y point is close to the typical duration of a high-yield portfolio. In addition, high-yield in general tends to be more sensitive to rates volatility i.e. widens more as the volatility of rates goes up, than high grade. On average, historically, the BBB index widened 0.09bp for a 1pt move higher in the Merrill Lynch Option Volatility (MOVE) index, while BB and single-B indices widened by 0.36bp.

BBB-BB: the decompression sweet spot

The implication of this is likely to be some decompression between high yield and high grade spreads. And this is likely to emerge from the BBB/BB bucket, as the tourists in BB will likely be the first ones to abandon ship when volatility hits. There is an argument to be made that perhaps the non-traditional investors in BB, like insurance companies, are sticky holders i.e. they are unlikely to sell at a loss. This may be the case, although it depends on the timing of the bond purchase and the yields available within investment grade at that point, but on the whole it will still point to a lower bid for BB than has been the case in the past.

The spread ratio between BBBs and BBs may not dramatically change course in the near future. What is more likely we think is that one or two episodes of very quick appreciation in the front-end of the rates curve will cause a spike in the ratio i.e. BB underperforms BBB and then the ratio struggles to drop back even as volatility itself subsides. This will lead to an eventual drift higher in the ratio over the medium-term.

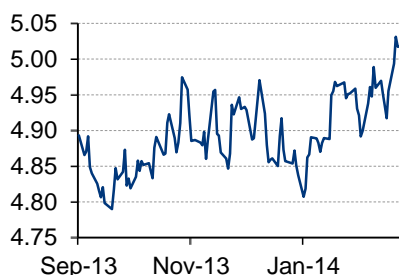
(On a related note, this is one of the main reasons for our preference for single-Bs over BBs within high yield, as we discuss [here](#)).

The implication for CDX: decompression

There are implications for the CDX HY/IG decompression trade as well. Given the poor liquidity in the market and the consequent fear of being unable to source bonds once they are sold (or paying too high a bid-ask in the process), high yield investors may choose to hedge via CDX HY. (They ought to perhaps hedge against rates volatility, rather than buy CDX protection, but our conversations so far have indicated little inclination to do so at this point.)

Granted, the HY index has been underperforming IG for a while (Chart 7). We think the spread ratio will probably continue to drift wider over time. For a trade, the new CDX series will likely offer a good entry point. As we write about in our [piece on the roll](#), HY22 will likely roll optically quite tight to IG22, prompting decompression trades (long IG, short HY) in the new index. The HY21 skew has been relatively large in recent days with the index trading about 15bp wider than intrinsic value. Net non-dealer long positioning in the index has increased a little in recent weeks though, which may lower demand for rolling shorts into S22 and lead to a tighter skew in the new series. Assuming the skew remains the same as in S21, to determine the high end of the possible HY22/IG22 ratio, we get about 4.79, compared to 5.02 for HY21/IG21. That looks like an attractive entry point for a decompression trade.

Chart 7: CDX HY21/IG21



Source: BofA Merrill Lynch Global Research

RV at a glance – CDS Indices

CDS indices were tighter over the week, with CDX IG ending the week 5bp tighter and CDX HY 18bp tighter. Europe outperformed, as Main tightened 6bp and iTraxx Crossover tightened 35bp. Skews re-traced from the relatively wide levels seen last week, as single named lagged index performance for (Table 1).

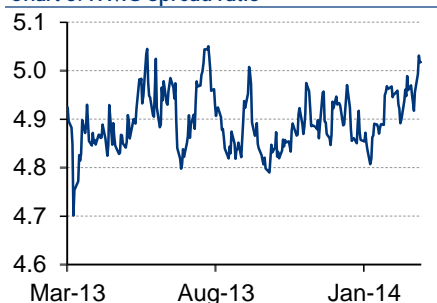
Table 1: CDS Indices - spread, intrinsic and skew

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	72	-5	-1	-2	71	-4	-5	-5	1	-1	4	3
CDX HY	316	-18	-3	-3	300	-12	-24	-21	16	-6	21	17
iTraxx Main	81	-6	-1	0	79	-3	-2	3	2	-3	2	-3
iTraxx XO	310	-35	-29	-45	305	-6	-17	-31	5	-29	-12	-14
iTraxx FinSen	100	-8	-2	0	96	-4	-2	0	4	-4	0	-1
iTraxx FinSub	152	-13	-1	-2	147	-8	-3	1	5	-5	2	-2
iTraxx HiVol	100	-9	-5	-4	99	-6	-6	1	1	-3	1	-5

Source: BofA Merrill Lynch Global Research, Spreads for the On The Run series. Until there sufficient data points for the On The Run series, the 1W/1M/3M changes reflect spreads changes for the previous series.

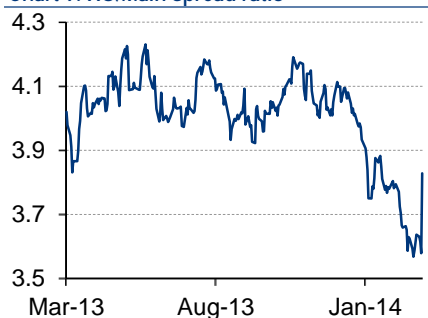
The HY21/IG21 ratio increased to 5.02 from 4.92 a week ago, at the highs for this series (Chart 8). In Europe, the new series of iTraxx rolled to a higher XO/Main ratio relative to S20. XO20/Main20 is at 3.83 (Chart 9). The Sub/Senior ratio was little changed, ending the week at 1.52 from 1.51 last week (Chart 10).

Chart 8: HY/IG spread ratio



Source: BofA Merrill Lynch Global Research

Chart 9: XO/Main spread ratio



Source: BofA Merrill Lynch Global Research

Chart 10: iTraxx Fin Sub/Sen spread ratio



Source: BofA Merrill Lynch Global Research

Both Main-IG and XO-HY spread differences declined over the week. The Main-IG spread differential is at 9bp versus 10bp a week ago, while XO20-HY21 keeps testing new lows, ending the week at -69bp from -52bp last week (Chart 11 and Chart 12).

Chart 11: iTraxx Main- CDX IG



Source: BofA Merrill Lynch Global Research

Chart 12: iTraxx XO – CDX HY



Source: BofA Merrill Lynch Global Research

RV at a glance – Cash versus CDS

Table 2: CDX vs. ML Cash Indices

Index	Spread	1W-Chng	1M-Chng	3M-Chng
CDX IG	72	-5	-1	-2
HG Cash	121	-3	-3	-9
CDX HY	316	-18	-3	-3
HY Cash	379	-13	-13	-25

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

Cash indices underperformed CDX indices this week in both HG and HY (Table 2). While our US HG cash index tightened by 3bp, CDX IG tightened by 5bp. We see a similar trend in HY, where cash tightened 13bp compared to 18bp for CDX HY. CDX IG generally saw the same tightening across the curve this week, though the 7 year bucket slightly underperformed. For the HG cash curve, the 7-10 year bucket outperformed this week with 6bp of tightening (Table 3).

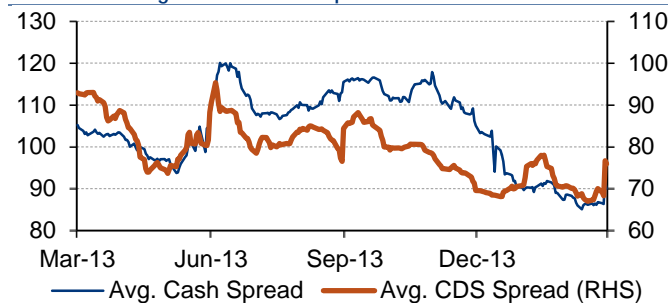
Table 3: High Grade Cash and CDX curves

Index	Spread	1W-Chng	1M-Chng	3M-Chng	Index	OAS	1W-Chng	1M-Chng	3M-Chng
CDX IG 3Y	38	-6	-2	0	US HG 1-3yr	65	-1	1	-7
CDX IG 5Y	72	-5	-1	-2	US HG 3-5yr	93	-2	-3	-13
CDX IG 7Y	98	-4	0	-1	US HG 5-7yr	134	-4	-2	-5
CDX IG 10Y	114	-5	0	0	US HG 7-10yr	145	-6	-8	-12

Source: BofA Merrill Lynch Global Research, Tables shows option adjusted spreads (OAS) for the ML cash indices.

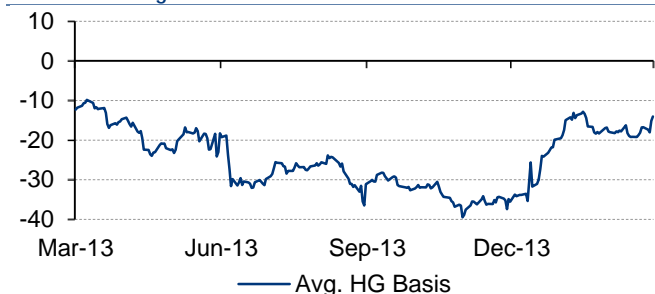
Our measure of cash-CDS basis for CDX IG issuers was -14bp, higher than the previous week's level of -17bp (Chart 14). For HY, the basis also became more positive over the same period as it shifted from -38bp to -25bp (Chart 16).

Chart 13: Average cash and CDS spreads for CDX IG issuers



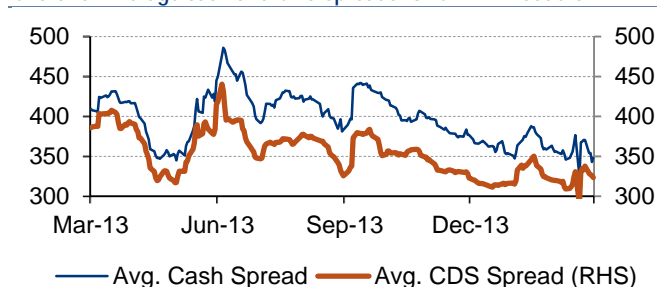
Source: BofA Merrill Lynch Global Research, Average spreads for a selection of issuers in the On The Run CDX IG index. Currently includes 121 IG21 constituents.

Chart 14: Average cash-CDS basis for CDX IG issuers



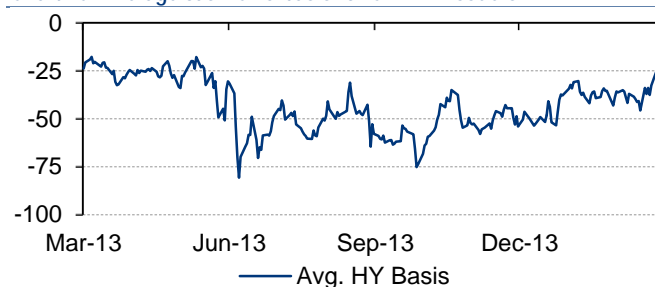
Source: BofA Merrill Lynch Global Research, Average cash-CDS for a selection of issuers in the On The Run CDX IG index. Currently includes 121 IG21 constituents.

Chart 15: 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 89 HY21 constituents.

Chart 16: 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 89 HY21 constituents.

RV at a glance – Credit vs. Equity

European equities outperformed US equities, with the Eurostoxx 50 up 2.3% versus a 1.4% gain in the S&P (Table 4). Volatility indices declined accordingly, with the VSTOXX index having declined by 4pts and the VIX 1.7pts. Similar to equity performance this past week, in credit European indices outperformed US counterparts as Main tightened more so CDX IG, and Crossover more so than CDX HY.

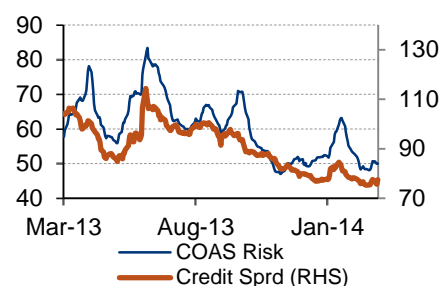
Table 4: CDS Indices vs. Equity Benchmarks and Equity Volatility

Index	5y Spread	1W-Chng	1M-Chng	3M-Chng	Index	Level	1W-Chng	1M-Chng	3M-Chng
CDX IG	72	-5	-1	-2	S&P 500	1872	1.4%	1.7%	4.8%
CDX HY	316	-18	-3	-3	VIX	14.5	-1.7	0.7	-1.5
iTraxx Main	81	-6	-1	0	Eurostoxx50	3089	2.3%	-0.9%	3.7%
iTraxx XO	310	-35	-29	-45	VSTOXX	18.1	-4.0	1.0	-0.4

Source: BofA Merrill Lynch Global Research, Bloomberg

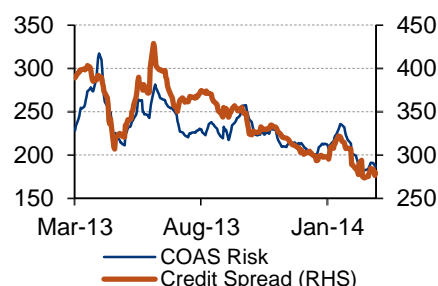
Average spread for HG COAS was 1bp wider on the week, with no change in equity implied risk (Chart 17). European HG spreads were unchanged and equity implied risk rose 2bps (Chart 18). HY COAS was roughly unchanged from a week ago, as spreads were 2bps tighter while COAS risk dropped 3bps (Chart 19). The 3m COAS z-scores for US HG, US HY, and EU HG stand at 0.64, 0.40, and -0.31 respectively, not indicating any significant dislocation at the moment (Chart 20, Chart 21, and Chart 22).

Chart 17: US HG COAS Risk vs. Spread



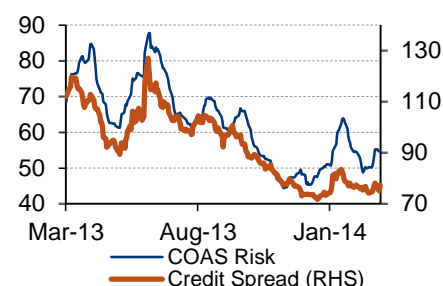
Source: BofA Merrill Lynch Global Research, Avg. across 368 listed high grade USD issuers.

Chart 18: US HY COAS Risk vs. Spread



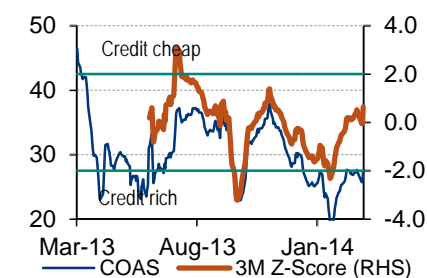
Source: BofA Merrill Lynch Global Research, Avg. across 102 listed high yield USD issuers.

Chart 19: EU HG COAS Risk vs. Spread



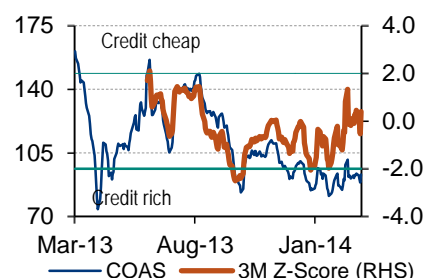
Source: BofA Merrill Lynch Global Research, Avg. across 201 listed high grade EUR issuers.

Chart 20: US HG COAS & Z-Score



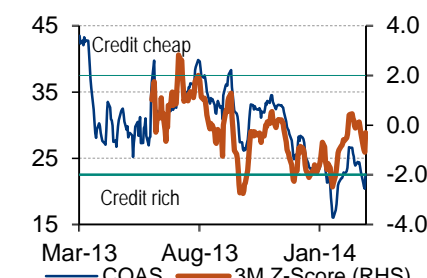
Source: BofA Merrill Lynch Global Research, COAS = Spread - COAS Risk. A positive (negative) z-score indicates that credit is trending cheap (rich) relative to equity. Z-scores above (below) +2 (-2) can be considered indicative a significant debt-equity dislocation.

Chart 21: US HY COAS & Z-Score



Source: BofA Merrill Lynch Global Research, COAS = Spread - COAS Risk. A positive (negative) z-score indicates that credit is trending cheap (rich) relative to equity. Z-scores above (below) +2 (-2) can be considered indicative a significant debt-equity dislocation.

Chart 22: EU HG COAS & Z-Score



Source: BofA Merrill Lynch Global Research, COAS = Spread - COAS Risk. A positive (negative) z-score indicates that credit is trending cheap (rich) relative to equity. Z-scores above (below) +2 (-2) can be considered indicative a significant debt-equity dislocation.

US COAS Dislocations Rich to Equities

According to our COAS model, this week's richest US name is Capital One Financial Corp. Capital One has a 3-month z-score of -2.7, its CDS spread is 1.4 standard deviations tight to its 3-month average, and its credit risk is 2.7 standard deviations above its 3-month average. Capital One's equity gained 2.1% this week while its vol increased 3 vol points. During the most recent annual Fed stress test, Capital One Financial Corp saw strong results as it was determined that its Tier 1 common capital ratio would not fall below 10.4%.

After Capital One, Constellation Brands Inc screens as the second richest name to its equity. It has a 3-month z-score of -2.3, its CDS spread is 2.0 standard deviations tight to its 3-month average, and its credit risk is 2.0 standard deviations above its 3-month average. Constellation's equity gained 0.2% this week as its vol increased 1 vol point. Following Capital One and Constellation, Reynolds American Inc, Noble Corp, and Berkshire Hathaway Inc each screen as rich to their equity.

Table 5: Top 5 richest to equity according to COAS

Issuer	Equity Px	Wkly Chng	Vol	Wkly Chng	CDS	Wkly Chng	3M Avg	3M Z-Score	Credit Risk	Wkly Chng	3M Avg	3M Z-Score	Credit OAS	Wkly Chng	3M Avg	3M Z-Score
Capital One Financial Corp	74.3	2.10%	25	3	55	-2	61	-1.4	52	9	40	2.7	4	-11	21	-2.7
Constellation Brands Inc	82.5	0.20%	30	1	98	-3	115	-2.0	91	5	69	2.0	7	-8	46	-2.3
Reynolds American Inc	53.6	-1.00%	34	0	72	2	68	0.6	81	3	38	2.3	-9	-1	29	-2.3
Noble Corp	31.1	7.20%	30	1	119	0	114	1.0	101	4	87	2.1	18	-4	27	-2.1
Berkshire Hathaway Inc	124.4	0.70%	15	0	59	-4	68	-1.7	28	0	27	0.2	32	-5	41	-2.0

Source: BofA Merrill Lynch Global Research

Cheap to Equities

With a 3-month z-score of 3.1, AES Corp screens as the cheapest US name to its equity in our COAS universe. AES's CDS spread is 2.2 standard deviations wide to its 3-month average while its equity-implied credit risk is 0.3 standard deviations below its 3-month average. During the past week, AES's stock advanced 0.9% and its vol fell 1 vol point.

Following AES, Verizon Communications Inc ranks second on our list of names that register as cheap to their equity. Verizon has a 3-month z-score of 2.7, its CDS spread is 0.8 standard deviations wide to its 3-month average, and its credit risk is 1.3 standard deviations below its 3-month average. Over the past week, its equity gained 2.6% while its vol fell 2 vol points. This week, Verizon priced \$8.2bn of debt which was used to fund a tender offer of older debt. After AES Corp and Verizon, Caterpillar Inc, Devon Energy Corp, and Deluxe Corp each screen as cheap to their equity.

Table 6: Top 5 cheapest to equity according to COAS

Issuer	Equity Px	Wkly Chng	Vol	Wkly Chng	CDS	Wkly Chng	3M Avg	3M Z-Score	Credit Risk	Wkly Chng	3M Avg	3M Z-Score	Credit OAS	Wkly Chng	3M Avg	3M Z-Score
AES Corp	14.0	0.90%	23	-1	221	20	192	2.2	95	0	98	-0.3	126	20	94	3.1
Verizon Comm Inc	47.2	2.60%	15	-2	61	2	57	0.8	30	-5	37	-1.3	31	7	19	2.7
Caterpillar Inc	96.2	0.60%	17	0	57	1	53	1.1	23	0	27	-1.1	34	1	26	2.5
Devon Energy Corp	63.3	1.10%	20	0	77	6	75	0.3	46	0	56	-1.2	31	6	20	2.4
Deluxe Corp	52.9	1.50%	26	0	253	16	229	1.8	102	0	110	-0.9	151	16	119	2.3

Source: BofA Merrill Lynch Global Research

Europe COAS Dislocations Rich to Equities

According to our COAS model, this week's richest European name is Koninklijke Ahold NV. Ahold has a 3-month z-score of -4.4, its CDS spread is 0.7 standard deviations wide to its 3-month average, and its credit risk is 5.1 standard deviations above its 3-month average. The firm's equity gained 2.6% this week while its vol increased 14 vol points. Last week, the company agreed to purchase Spar AG's supermarket business in the Czech Republic for about \$265mn.

After Ahold, Next PLC screens as the second richest name to its equity. Next has a 3-month z-score of -2.9, its CDS spread is 0.3 standard deviations wide to its 3-month average, and its credit risk is 2.0 standard deviations above its 3-month average. Next's equity increased 1.9% over the past week and its vol increased 1 vol point. The company recently reported a 12% increase in full-year earnings. Following Ahold and Next, Atlantia SpA, Deutsche Post AG, and Koninklijke Philips NV each screen as rich to their equity.

Table 7: Top 5 richest to equity according to COAS

Issuer	Equity Px	Wkly Chng	Vol	Wkly Chng	CDS	Wkly Chng	3M Avg	3M Z-Score	Credit Risk	Wkly Chng	3M Avg	3M Z-Score	Credit OAS	Wkly Chng	3M Avg	3M Z-Score
Koninklijke Ahold NV	13.7	2.60%	32	14	83	0	79	0.7	88	50	39	5.1	-4	-50	40	-4.4
Next PLC	67.3	1.90%	23	1	58	1	57	0.3	26	5	18	2.0	32	-4	38	-2.9
Atlantia SpA	18.5	3.00%	21	1	78	-7	95	-2.1	53	2	49	0.9	26	-9	47	-2.7
Deutsche Post AG	25.6	5.70%	29	2	36	-1	38	-2.4	51	4	36	2.0	-15	-5	2	-2.2
Koninklijke Philips NV	24.2	0.10%	28	2	50	2	47	1.7	50	6	40	2.4	-1	-4	7	-2.1

Source: BofA Merrill Lynch Global Research

Cheap to Equities

With a 3-month z-score of 2.1, Banco Bilbao Vizcaya screens as the cheapest European name to its equity in our COAS universe. BBVA's CDS spread is 0.1 standard deviations wide to its 3-month average while its equity-implied credit risk is 1.1 standard deviations below its 3-month average. The company's equity fell 0.8% over the past week and its vol decreased 2 vol points.

Following BBVA, E.ON AG ranks second on our list of names that register as cheap to their equity. E.ON has a 3-month z-score of 2.1, its CDS spread is 1.5 standard deviations wide to its 3-month average, and its credit risk is 0.2 standard deviations above its 3-month average. The firm's equity gained 1.9% this week as its vol declined 2 vol points. After BBVA and E.ON, Wolters Kluwer NV, BP PLC, and Reed Elsevier PLC each screen as cheap to their equity.

Table 8: Top 5 cheapest to equity according to COAS

Issuer	Equity Px	Wkly Chng	Vol	Wkly Chng	CDS	Wkly Chng	3M Avg	3M Z-Score	Credit Risk	Wkly Chng	3M Avg	3M Z-Score	Credit OAS	Wkly Chng	3M Avg	3M Z-Score
Banco Bilbao Vizcaya	8.8	-0.80%	25	-2	136	-7	135	0.1	81	-10	94	-1.1	55	3	41	2.1
E.ON AG	13.7	1.90%	24	-2	81	6	71	1.5	63	-5	61	0.2	19	11	11	2.1
Wolters Kluwer NV	20.1	0.40%	19	0	75	3	65	2.1	44	1	42	0.4	32	2	23	2.1
BP PLC	4.7	-2.10%	17	0	56	10	47	2.7	32	3	28	1.2	23	7	19	2.0
Reed Elsevier PLC	9.2	-0.60%	17	0	55	4	49	1.9	32	2	31	0.2	23	2	18	1.9

Source: BofA Merrill Lynch Global Research

HG Basis Screen

Starwood Hotels & Resorts Worldwide Inc, with a basis of -69bps, occupies the topmost position on our list of issuers with the most negative basis. Following Starwood is FirstEnergy Corp, which has a basis of -63bps. Over the past week, we have seen only one replacement in our top 10 bucket of issuers with the most negative basis as Yum! Brands Inc has been replaced by MDC Holdings Inc.

Table 9: CDX IG 22 Basis Report

Sector	Ticker	Issuer	Coupon	Maturity	Price	Cash Sprd	5y CDS	Interp CDS	Hedge Ratio	Basis	1W Ago	1W Chg	1M Avg
Gaming, Lodging & Leisure	HOT	Starwood Hotels & Resorts Worldwide Inc	6.75	May-18	116.23	109	56	40	1.30	-69	-65	-3	-69
Electric Utilities	FE	FirstEnergy Corp	2.75	Mar-18	99.86	138	111	75	1.01	-63	-59	-4	-65
Advertising Dependent Media	OMC	Omnicom Group Inc	4.45	Aug-20	106.88	106	32	43	1.13	-62	-56	-6	-55
P&C Insurance	L	Loews Corp	2.625	May-23	90.74	112	33	54	0.86	-58	-52	-7	-51
Technology	PBI	Pitney Bowes Inc	6.25	Mar-19	112.85	161	113	105	1.24	-56	-51	-5	-57
Consumer Products	BEAM	Beam Inc	1.75	Jun-18	97.49	86	43	32	0.97	-54	-53	-1	-52
Electric Utilities	EXC	Exelon Corp	5.15	Dec-20	108.46	145	69	91	1.16	-54	-51	-3	-52
Transportation	NSC	Norfolk Southern Corp	5.9	Jun-19	115.70	80	27	27	1.29	-53	-51	-2	-55
Food, Beverage & Tobacco	RAI	Reynolds American Inc	3.25	Nov-22	92.96	164	70	112	0.90	-52	-52	0	-43
Consumer Durables - Non Auto	MDC	MDC Holdings Inc	5.625	Feb-20	105.57	247	179	196	1.12	-51	-40	-11	-56
Technology	ARW	Arrow Electronics Inc	3	Mar-18	101.98	107	88	58	1.05	-49	-44	-5	-42
Technology	CSC	Computer Sciences Corp	6.5	Mar-18	115.33	100	81	55	1.28	-45	-47	2	-36
Aerospace & Defense	NOC	Northrop Grumman Corp	1.75	Jun-18	98.33	67	29	22	0.98	-45	-42	-3	-45
Transportation	CSX	CSX Corp	4.25	Jun-21	106.45	88	29	44	1.13	-45	-47	3	-51
Gaming, Lodging & Leisure	MAR	Marriott International Inc/DE	3	Mar-19	101.94	88	47	43	1.04	-44	-41	-4	-41
Technology	MSI	Motorola Solutions Inc	3.75	May-22	98.10	148	65	105	0.98	-43	-46	2	-45
Paper and Forest Products	MWV	MeadWestvaco Corp	7.375	Sep-19	119.96	138	94	98	1.36	-39	-31	-8	-38
Electric Utilities	AEP	American Electric Power Co Inc	1.65	Dec-17	99.09	59	33	20	0.99	-39	-30	-9	-35
Banks	COF	Capital One Bank USA NA	2.25	Feb-19	98.82	76	40	37	0.99	-39	-34	-5	-32
Food, Beverage & Tobacco	CAG	ConAgra Foods Inc	2.1	Mar-18	99.33	86	71	49	1.00	-37	-27	-10	-30
Gaming, Lodging & Leisure	CCL	Carnival Corp	3.95	Oct-20	102.45	130	68	92	1.06	-37	-36	-1	-38
Paper and Forest Products	WY	Weyerhaeuser Co	7.375	Oct-19	121.65	112	69	75	1.39	-37	-30	-7	-28
Health Care Equipment & Services	BSX	Boston Scientific Corp	2.65	Oct-18	100.43	92	68	56	1.02	-36	-28	-8	-30
Chemicals	EMN	Eastman Chemical Co	2.4	Jun-17	102.02	67	71	31	1.04	-36	-31	-5	-26
Pipelines	SRE	Sempra Energy	2.3	Apr-17	102.22	55	40	19	1.05	-35	-27	-9	-30
Electric Utilities	D	Dominion Resources Inc/VA	1.4	Sep-17	98.68	59	42	24	0.98	-35	-36	0	-35
Transportation	LUV	Southwest Airlines Co	5.75	Dec-16	111.25	64	71	29	1.21	-35	-35	0	-35
P&C Insurance	CB	Chubb Corp/The	5.75	May-18	114.70	55	28	21	1.27	-34	-27	-7	-30
Consumer Products	NWL	Newell Rubbermaid Inc	2.05	Dec-17	99.95	77	68	43	1.01	-34	-36	2	-35
Paper and Forest Products	IP	International Paper Co	9.375	May-19	130.65	106	75	73	1.55	-33	-28	-5	-31
Food, Beverage & Tobacco	MO	Altria Group Inc	4.75	May-21	108.16	108	50	76	1.16	-32	-32	0	-33
Food, Beverage & Tobacco	MDLZ	Mondelez International Inc	2.25	Feb-19	98.91	75	47	43	0.99	-32	-26	-6	-25
Advertising Dependent Media	TWX	Time Warner Inc	3.4	Jun-22	98.69	101	42	69	0.99	-32	-35	3	-35
Services	MCK	McKesson Corp	1.4	Mar-18	97.76	57	36	26	0.97	-32	-33	1	-33
Retail	YUM	Yum! Brands Inc	3.75	Nov-21	100.89	120	58	89	1.03	-31	-35	4	-34
Services	CAH	Cardinal Health Inc	1.7	Mar-18	98.94	56	37	25	0.99	-31	-26	-5	-28
Advertising Dependent Media	FOXA	21st Century Fox America Inc	4.5	Feb-21	108.20	85	38	54	1.16	-31	-37	6	-32
Retail	AZO	AutoZone Inc	4	Nov-20	104.45	103	51	73	1.09	-30	-25	-6	-24
Technology	EXPE	Expedia Inc	5.95	Aug-20	110.96	178	118	150	1.21	-28	-36	8	-37
Other Insurance	MMC	Marsh & McLennan Cos Inc	2.55	Oct-18	101.47	59	37	32	1.04	-27	-32	4	-33
P&C Insurance	ALL	Allstate Corp/The	7.45	May-19	124.02	63	37	36	1.43	-27	-24	-3	-24
Retail	GPS	Gap Inc/The	5.95	Apr-21	111.90	163	90	136	1.22	-27	-35	8	-33
Food and Drug Retail	CVS	CVS Caremark Corp	2.25	Dec-18	99.83	60	38	33	1.01	-27	-29	2	-29
Oil & Gas	APC	Anadarko Petroleum Corp	6.375	Sep-17	114.48	82	88	55	1.27	-27	-22	-5	-21
Cable/DBS	CMCSA	Comcast Corp	1.974	Apr-19	97.71	65	42	39	0.97	-25	-22	-3	-21
P&C Insurance	ACE	ACE Ltd	5.9	Jun-19	117.03	57	31	31	1.31	-25	-22	-3	-22
Food, Beverage & Tobacco	HSB	Hillshire Brands Co/The	4.1	Sep-20	102.87	139	88	114	1.06	-25	-21	-5	-25
Aerospace & Defense	BA	Boeing Capital Corp	2.9	Aug-18	104.08	36	14	11	1.08	-25	-24	-1	-24
Advertising Dependent Media	VIA	Viacom Inc	2.5	Sep-18	101.27	60	45	37	1.03	-24	-22	-1	-22
Diversified Financials	AXP	American Express Co	1.55	May-18	98.06	54	42	32	0.97	-22	-18	-4	-19
Aerospace & Defense	RTN	Raytheon Co	2.5	Dec-22	93.14	74	29	52	0.90	-22	-28	6	-29
Advertising Dependent Media	CBS	CBS Corp	1.95	Jul-17	101.03	51	57	30	1.03	-21	-19	-3	-18
Cable/DBS	DTV	DIRECTV Holdings LLC	1.75	Jan-18	98.44	83	97	63	0.98	-21	-12	-9	-14
Industrial Products	HON	Honeywell International Inc	5	Feb-19	113.07	43	25	23	1.24	-20	-29	9	-28
Aerospace & Defense	LMT	Lockheed Martin Corp	3.35	Sep-21	101.22	72	31	52	1.03	-20	-25	5	-23
Real Estate	EOR	ERP Operating LP	4.625	Dec-21	107.51	102	54	82	1.14	-20	-21	1	-22
Oil & Gas	NBR	Nabors Industries Inc	4.625	Sep-21	101.77	192	117	172	1.05	-20	-20	0	-24
Pipelines	KMP	Kinder Morgan Energy Partners LP	2.65	Feb-19	99.51	102	93	84	1.00	-18	-20	2	-16

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Table 9: CDX IG 22 Basis Report

Sector	Ticker	Issuer	Coupon	Maturity	Price	Cash Sprd	5y CDS	Interp CDS	Hedge Ratio	Basis	1W Ago	1W Chg	1M Avg
Food, Beverage & Tobacco	GIS	General Mills Inc	3.15	Dec-21	99.89	67	30	49	1.01	-17	-16	-2	-19
Transportation	UNP	Union Pacific Corp	2.25	Feb-19	100.51	38	23	21	1.02	-17	-20	3	-21
Pharmaceuticals	AMGN	Amgen Inc	2.125	May-17	102.18	36	42	21	1.05	-15	-18	2	-15
Oil & Gas	RIG	Transocean Inc	2.5	Oct-17	100.56	109	163	94	1.02	-15	-7	-9	-13
Food and Drug Retail	KR	Kroger Co/The	2.3	Jan-19	98.92	81	75	66	0.99	-15	-7	-8	-6
Technology	HPQ	Hewlett-Packard Co	2.75	Jan-19	100.50	92	88	77	1.02	-14	-11	-3	-6
Health Care Equipment & Services	BAX	Baxter International Inc	1.85	Jun-18	99.96	34	26	20	1.01	-14	-23	9	-22
P&C Insurance	HIG	Hartford Financial Services Group Inc/The	4	Oct-17	107.49	58	69	44	1.14	-14	-6	-8	-13
Oil & Gas	HAL	Halliburton Co	2	Aug-18	100.21	41	37	29	1.01	-13	-11	-1	-13
Pharmaceuticals	BMJ	Bristol-Myers Squibb Co	1.75	Mar-19	98.14	37	27	25	0.98	-13	-14	1	-11
Cable/DBS	COXNT	Cox Communications Inc	3.25	Dec-22	93.99	144	84	132	0.91	-12	-15	2	-22
Multi-line Insurance	XL	XLIT Ltd	2.3	Dec-18	99.87	63	57	51	1.01	-12	-17	5	-18
Industrial Products	DE	Deere & Co	2.6	Jun-22	95.38	65	32	54	0.93	-12	-16	4	-15
Real Estate	SPG	Simon Property Group LP	2.2	Feb-19	99.41	59	52	48	1.00	-11	-12	1	-13
Food, Beverage & Tobacco	TSN	Tyson Foods Inc	4.5	Jun-22	104.00	138	75	127	1.09	-11	-44	33	-28
Chemicals	SHW	Sherwin-Williams Co/The	1.35	Dec-17	98.80	37	43	27	0.99	-10	-12	1	-12
Multi-line Insurance	GNW	Genworth Holdings Inc	7.7	Jun-20	121.68	157	125	148	1.39	-10	1	-10	-5
Retail	HD	Home Depot Inc/The	2.25	Sep-18	101.45	33	28	23	1.03	-10	-16	6	-16
Metals & Mining	ABXCN	Barrick Gold Corp	2.5	May-18	99.12	126	170	117	1.00	-9	-3	-6	-8
Transportation	R	Ryder System Inc	2.55	Jun-19	99.62	78	70	69	1.00	-9	-16	7	-17
Services	AET	Aetna Inc	1.5	Nov-17	99.53	36	43	28	1.00	-8	-6	-1	-13
Retail	LOW	Lowe's Cos Inc	1.625	Apr-17	101.29	21	31	14	1.03	-7	-2	-5	-3
Auto Manufacturers	F	Ford Motor Co	6.5	Aug-18	116.12	98	114	93	1.30	-6	-8	3	-10
Retail	TGT	Target Corp	2.9	Jan-22	97.57	74	44	69	0.97	-5	-6	1	-7
Diversified Financials	NRUC	National Rural Utilities Cooperative Finance Corp	2.15	Feb-19	99.50	52	52	48	1.00	-4	-5	1	-4
Advertising Dependent Media	DIS	Walt Disney Co/The	1.1	Dec-17	98.74	15	19	12	0.98	-4	-7	3	-4
Wireline Telecom	T	AT&T Inc	2.375	Nov-18	100.29	63	69	60	1.01	-3	-5	2	-4
Chemicals	DOW	Dow Chemical Co/The	4.125	Nov-21	103.91	106	70	104	1.08	-2	-6	4	-4
Transportation	UPS	United Parcel Service Inc	1.125	Oct-17	99.12	16	23	14	0.99	-2	-3	1	0
Retail	WMT	Wal-Mart Stores Inc	1.95	Dec-18	100.18	21	21	18	1.01	-2	0	-2	0
Pharmaceuticals	PFE	Pfizer Inc	1.5	Jun-18	99.03	22	25	19	0.99	-2	-12	10	-11
Retail	MCD	McDonald's Corp	1.875	May-19	99.25	17	17	16	1.00	-1	3	-4	-4
Technology	IBM	International Business Machines Corp	1.95	Feb-19	99.36	33	36	33	1.00	-1	-5	4	-3
Multi-line Insurance	AIG	American International Group Inc	3.375	Aug-20	101.71	88	70	88	1.04	0	6	-7	3
Diversified Financials	HRB	Block Financial LLC	5.5	Nov-22	106.14	203	139	203	1.13	0	-3	3	-10
Diversified Telecom	VZ	Verizon Communications Inc	3.65	Sep-18	106.50	51	64	52	1.12	1	-9	10	-17
Technology	XRX	Xerox Corp	2.75	Mar-19	100.24	92	101	94	1.02	2	6	-4	5
Services	UNH	UnitedHealth Group Inc	1.625	Mar-19	97.31	41	46	43	0.96	2	-5	7	-2
Oil & Gas	COP	ConocoPhillips	1.05	Dec-17	98.54	14	26	16	0.98	2	4	-2	5
Food, Beverage & Tobacco	CPB	Campbell Soup Co	4.25	Apr-21	106.42	87	61	89	1.12	2	-19	21	-24
Consumer Products	WHR	Whirlpool Corp	2.4	Mar-19	99.13	82	92	85	1.00	2	11	-8	9
Oil & Gas	DVN	Devon Energy Corp	2.25	Dec-18	99.56	65	78	68	1.00	3	2	2	2
Chemicals	DD	El du Pont de Nemours & Co	4.25	Apr-21	108.48	56	41	60	1.16	3	-1	4	-7
Oil & Gas	VLO	Valero Energy Corp	6.125	Feb-20	116.60	96	88	100	1.30	4	1	4	2
Industrial Products	CAT	Caterpillar Inc	1.5	Jun-17	100.59	21	56	27	1.02	6	6	0	3
Industrial Products	AVT	Avnet Inc	4.875	Dec-22	104.45	161	98	168	1.09	7	5	3	-2
Retail	JWN	Nordstrom Inc	4	Oct-21	104.88	84	62	92	1.10	8	4	4	5
Metals & Mining	AA	Alcoa Inc	5.4	Apr-21	104.62	231	175	241	1.10	10	-6	16	-5
Cable/DBS	TWC	Time Warner Cable Inc	4	Sep-21	103.21	111	86	122	1.07	10	-3	13	0
Retail	M	Macy's Inc	3.875	Jan-22	102.64	98	68	109	1.06	11	4	7	2
Consumer Products	PG	Procter & Gamble Co/The	1.6	Nov-18	99.16	11	28	25	0.99	14	17	-3	16
Oil & Gas	WFT	Weatherford International Ltd/Switzerland	4.5	Apr-22	103.58	147	110	160	1.08	14	1	12	0
Diversified Financials	GE	General Electric Capital Corp	2.3	Jan-19	100.64	43	62	58	1.02	15	18	-3	18
Automobiles	JCI	Johnson Controls Inc	3.75	Dec-21	102.86	84	69	102	1.06	18	13	5	11
P&C Insurance	BRK	Berkshire Hathaway Inc	2	Aug-18	100.51	30	59	48	1.02	18	30	-12	24
Facilities	DGX	Quest Diagnostics Inc	4.7	Apr-21	105.59	144	119	163	1.11	19	11	8	15
Metals & Mining	NEM	Newmont Mining Corp	3.5	Mar-22	90.82	247	199	271	0.86	24	13	11	15
Life Insurance	MET	MetLife Inc	1.756	Dec-17	100.77	23	69	47	1.02	24	31	-7	23
Metals & Mining	FCX	Freeport-McMoRan Copper & Gold Inc	3.1	Mar-20	97.18	156	167	188	0.97	31	33	-2	23
Retail	DRI	Darden Restaurants Inc	4.5	Oct-21	98.27	236	199	270	0.99	34	23	11	20
Retail	SPLS	Staples Inc	2.75	Jan-18	101.41	104	237	146	1.03	41	51	-9	47
Consumer Products	AVP	Avon Products Inc	4.6	Mar-20	101.73	220	258	285	1.05	65	70	-5	61
Retail	KSS	Kohl's Corp	4	Nov-21	101.54	135	137	202	1.04	67	64	3	66

Source: BofA Merrill Lynch Global Research

HY Basis Screen

Toys R Us Inc, with a basis of -204bps, occupies the topmost position on our list of issuers with the most negative basis. MGIC Investment Corp, with a basis of -170bps, is second on the list. Over the past week, we have seen three replacements in our top 10 bucket of issuers with the most negative basis as NOVA Chemicals Corp, Parker Drilling Co, and RadioShack Corp have been replaced by Dell Inc, Sabre Holdings Corp, and United Rentals Inc.

Table 10: CDX HY 21 Basis Report

Sector	Ticker	Issuer	Coupon	Maturity	Price	Cash Sprd	5y CDS	Interp CDS	Hedge Ratio	Basis	1W Ago	1W Chg	1M Avg
Retail	TOY	Toys R Us Inc	10.375	Aug-17	88.13	1386	1249	1181	0.85	-204	-191	-14	-210
Other Insurance	MTG	MGIC Investment Corp	5.375	Nov-15	103.63	255	270	86	1.08	-170	-160	-10	-172
Commercial Services	RMK	ARAMARK Corp	5.75	Mar-20	105.50	314	149	171	1.12	-143	-120	-22	-129
Paper and Forest Products	LPX	Louisiana-Pacific Corp	7.5	Jun-20	111.00	304	144	176	1.21	-129	-158	30	-147
Gaming, Lodging & Leisure	BC	Brunswick Corp/DE	4.625	May-21	96.75	287	105	159	0.97	-128	-137	10	-138
Advertising Dependent Media	NYT	New York Times Co/The	6.625	Dec-16	110.50	168	129	45	1.20	-123	-117	-6	-122
Technology	DELL	Dell Inc	3.1	Apr-16	101.25	188	371	82	1.03	-106	-81	-25	-94
Other Insurance	RDN	Radian Group Inc	9	Jun-17	114.88	279	285	180	1.29	-99	-105	6	-104
Technology	TSG	Sabre Holdings Corp	6.35	Mar-16	111.50	173	264	78	1.22	-95	-100	5	-101
Commercial Services	URI	United Rentals Inc	7.375	May-20	110.50	308	183	214	1.21	-95	-104	9	-79
Chemicals	NCX	NOVA Chemicals Corp	5.25	Aug-23	107.06	239	113	145	1.14	-94	-117	23	-94
Gaming, Lodging & Leisure	BYD	Boyd Gaming Corp	9	Jul-20	110.25	496	357	403	1.21	-93	-96	3	-37
Paper and Forest Products	OI	Owens-Illinois Inc	7.8	May-18	116.75	187	147	105	1.31	-82	-100	18	-84
Oil & Gas	PKD	Parker Drilling Co	7.5	Aug-20	106.38	414	310	333	1.14	-81	-108	26	-92
Diversified Financials	ALLY	Ally Financial Inc	3.5	Jul-16	102.88	152	135	71	1.06	-80	-80	0	-77
Paper and Forest Products	SEE	Sealed Air Corp	8.125	Sep-19	111.50	229	142	149	1.23	-80	-86	6	-78
Consumer Durables - Non Auto	HOV	Hovnanian Enterprises Inc	8.625	Jan-17	111.00	335	486	255	1.22	-80	-55	-24	-85
Cable/DBS	DISH	DISH Network Corp	4.625	Jul-17	105.63	167	164	89	1.11	-78	-70	-8	-74
Consumer Durables - Non Auto	DHI	DR Horton Inc	3.625	Feb-18	101.50	190	168	113	1.04	-78	-73	-4	-74
Pipelines	KMI	Kinder Morgan Inc/DE	5.15	Mar-15	103.50	106	189	29	1.08	-77	-91	14	-80
Retail	RAD	Rite Aid Corp	6.75	Jun-21	108.75	386	240	311	1.17	-75	-89	14	-58
Retail	DDS	Dillard's Inc	7.13	Aug-18	114.00	200	165	127	1.26	-73	-85	13	-81
Food, Beverage & Tobacco	DF	Dean Foods Co	9.75	Dec-18	112.75	280	242	210	1.25	-70	-49	-21	-48
Consumer Durables - Non Auto	VMC	Vulcan Materials Co	6.5	Dec-16	111.75	110	120	41	1.22	-70	-76	6	-77
Chemicals	OLN	Olin Corp	5.5	Aug-22	102.00	263	145	195	1.06	-68	-93	24	-89
Textile & Apparel	JNY	Jones Group Inc/PA	6.875	Mar-19	101.13	479	443	413	1.05	-66	-55	-11	-50
Technology	SDSINC	SunGard Data Systems Inc	6.625	Nov-19	105.25	366	291	302	1.12	-64	-91	27	-89
Automobiles	CTBUS	Cooper Tire & Rubber Co	8	Dec-19	110.50	370	285	307	1.21	-63	-67	3	-72
Food, Beverage & Tobacco	SFD	Smithfield Foods Inc	6.625	Aug-22	107.75	369	225	305	1.16	-63	-92	28	-83
Facilities	UHS	Universal Health Services Inc	7	Oct-18	106.00	171	133	111	1.13	-60	-75	15	-84
Electric Utilities	NRG	NRG Energy Inc	7.625	Jan-18	112.25	267	322	207	1.24	-59	-68	9	-56
Industrial Products	BBDBCN	Bombardier Inc	7.5	Mar-18	112.25	262	296	203	1.24	-59	-58	-1	-56
Textile & Apparel	LEVI	Levi Strauss & Co	7.625	May-20	108.50	280	189	221	1.17	-58	-35	-24	-33
Consumer Durables - Non Auto	LEN	Lennar Corp	4.75	Dec-17	105.50	184	197	125	1.11	-58	-49	-9	-53
Technology	UIS	Unisys Corp	6.25	Aug-17	109.00	219	273	161	1.18	-57	-85	27	-91
Commercial Services	CAR	Avis Budget Group Inc	4.875	Nov-17	105.50	171	195	115	1.11	-56	-44	-12	-68
Commercial Services	HTZ	Hertz Corp/The	4.25	Apr-18	103.00	200	208	144	1.07	-56	-63	7	-60
Advertising Dependent Media	GCI	Gannett Co Inc	5.125	Jul-20	102.50	270	175	215	1.06	-55	-52	-3	-67
Consumer Durables - Non Auto	SPF	Standard Pacific Corp	8.375	May-18	117.75	214	219	160	1.33	-54	-35	-19	-40
Food, Beverage & Tobacco	HNZ	HJ Heinz Co	4.25	Oct-20	98.75	227	134	175	1.00	-52	-67	16	-50
Automobiles	GT	Goodyear Tire & Rubber Co/The	6.5	Mar-21	109.13	327	192	277	1.18	-51	-38	-13	-28
Diversified Financials	PHH	PHH Corp	7.375	Sep-19	109.00	344	289	294	1.18	-50	-73	23	-77
Diversified Financials	CIT	CIT Group Inc	5.5	Feb-19	107.75	197	154	148	1.15	-50	-50	1	-50
Chemicals	POL	PolyOne Corp	5.25	Mar-23	100.25	257	170	207	1.03	-50	-76	26	-65
Diversified Financials	AIG-IntLeaseFin	International Lease Finance Corp	3.875	Apr-18	102.00	189	182	143	1.05	-46	-67	21	-57
Consumer Durables - Non Auto	PHM	PulteGroup Inc	6.5	May-16	110.25	90	169	45	1.20	-45	-60	15	-54
Other Telecom	WIN	Windstream Holdings Inc	7.5	Jun-22	105.25	427	298	388	1.12	-39	-61	22	-62
Diversified Financials	AMGFN	Springleaf Finance Corp	6	Jun-20	101.50	358	292	320	1.05	-37	-47	10	-50
Technology	AMD	Advanced Micro Devices Inc	7.75	Aug-20	102.00	554	478	524	1.07	-30	-63	33	-50
Gaming, Lodging & Leisure	MGM	MGM Resorts International	8.625	Feb-19	119.25	236	229	207	1.36	-29	-38	9	-29
Consumer Durables - Non Auto	RYL	Ryland Group Inc/The	6.625	May-20	108.00	293	234	264	1.16	-28	-35	7	-50
Wireline Telecom	CTL	CenturyLink Inc	5.625	Apr-20	104.33	269	211	241	1.10	-28	-17	-11	-38
Oil & Gas	TSO	Tesoro Corp	4.25	Oct-17	105.00	151	220	125	1.10	-26	-28	2	-28
Real Estate	HST	Host Hotels & Resorts LP	6	Nov-20	109.38	140	91	121	1.18	-19	-2	-17	-14
Diversified Financials	STAR	iStar Financial Inc	7.125	Feb-18	112.50	219	280	201	1.24	-18	-25	7	-46
Wireline Telecom	LVL	Level 3 Communications Inc	11.875	Feb-19	113.25	247	254	229	1.27	-17	-40	23	23
Cable/DBS	CHTR	CCO Holdings LLC	7.375	Jun-20	109.25	316	283	302	1.18	-14	-54	40	-42

Table 10: CDX HY 21 Basis Report

Sector	Ticker	Issuer	Coupon	Maturity	Price	Cash Sprd	5y CDS	Interp CDS	Hedge Ratio	Basis	1W Ago	1W Chg	1M Avg
Commercial Services	IRM	Iron Mountain Inc	7.75	Oct-19	110.50	257	238	244	1.21	-13	-35	22	-10
Facilities	THC	Tenet Healthcare Corp	6.75	Feb-20	104.25	380	347	368	1.10	-12	-12	0	-19
Technology	STX	Seagate Technology HDD Holdings	6.8	Oct-16	113.50	55	123	43	1.25	-11	-41	29	-41
Technology	ALUPF	Alcatel-Lucent USA Inc	8.875	Jan-20	113.25	361	333	352	1.26	-8	-32	24	-23
Facilities	HCA	HCA Inc	8	Oct-18	117.75	200	231	194	1.33	-6	-13	7	-21
Cable/DBS	CVC	CSC Holdings LLC	8.625	Feb-19	119.75	228	245	222	1.37	-5	-16	11	-7
Consumer Durables - Non Auto	KBH	KB Home	8	Mar-20	112.75	329	294	325	1.25	-4	15	-19	-8
Electric Utilities	AES	AES Corp/VA	8	Oct-17	118.50	125	215	123	1.34	-2	-15	14	-27
Diversified Financials	DLX	Deluxe Corp	7	Mar-19	107.50	230	247	232	1.15	1	-18	20	-41
Retail	LB	L Brands Inc	6.625	Apr-21	112.00	223	169	226	1.23	3	-17	20	-3
Gaming, Lodging & Leisure	RCL	Royal Caribbean Cruises Ltd	11.875	Jul-15	114.75	18	155	23	1.30	5	-40	45	-23
Commercial Services	RRD	RR Donnelley & Sons Co	8.25	Mar-19	118.75	219	242	225	1.35	6	-7	12	-28
Facilities	CYH	Community Health Systems Inc	8	Nov-19	109.75	351	344	358	1.20	8	23	-16	16
Oil & Gas	CHK	Chesapeake Energy Corp	5.375	Jun-21	105.50	231	191	239	1.11	8	1	6	-25
Technology	AMKR	Amkor Technology Inc	6.375	Oct-22	103.75	360	285	371	1.09	11	-6	17	6
Wireline Telecom	FTR	Frontier Communications Corp	9.25	Jul-21	118.00	361	293	386	1.34	25	-9	34	-12
Food and Drug Retail	SVU	SUPERVALU Inc	6.75	Jun-21	101.25	459	406	486	1.05	27	-7	34	10
Automobiles	MTOR	Meritor Inc	6.75	Jun-21	105.75	355	287	389	1.12	34	15	19	16
Diversified Telecom	S	Sprint Communications Inc	9	Nov-18	122.00	203	276	238	1.40	35	22	14	19
Automobiles	AXL	American Axle & Manufacturing Inc	7.75	Nov-19	115.00	262	284	303	1.28	41	35	5	30
Oil & Gas	FST	Forest Oil Corp	7.5	Sep-20	86.00	882	931	926	0.80	43	49	-5	33
Commercial Services	RLGY	Realogy Group LLC	9	Jan-20	114.00	269	305	330	1.27	61	68	-7	81
Advertising Dependent Media	CCMO	Clear Channel Communications Inc	6.875	Jun-18	93.75	720	889	794	0.92	74	65	9	99
Metals & Mining	AKS	AK Steel Corp	8.375	Apr-22	98.50	619	649	701	1.01	82	79	3	72
Technology	FSL	Freescall Semiconductor Inc	10.75	Aug-20	115.88	211	263	302	1.31	92	114	-22	93
Retail	JCP	JC Penney Co Inc	5.75	Feb-18	84.00	995	1117	1114	0.76	119	148	-29	136
Retail	RSH	RadioShack Corp	6.75	May-19	52.00	3341	3469	3475	0.23	134	-271	405	-230
Metals & Mining	X	United States Steel Corp	6.875	Apr-21	105.25	380	438	525	1.12	145	138	7	145
Advertising Dependent Media	MNI	McClatchy Co/The	5.75	Sep-17	112.50	77	415	246	1.23	168	178	-10	190
Gaming, Lodging & Leisure	CZR	Caesars Entertainment Operating Co Inc	6.5	Jun-16	84.00	1504	2922	2236	0.76	732	588	143	540

Source: BofA Merrill Lynch Global Research

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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

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