

A Model for Outperformance

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In *144A-for-Life in Real Time*, we introduced a model that helps us quantify the spread value of certain risk factors, both today and over time. Specifically, we analyzed how much credit investors have historically been compensated for three main categories of risk: credit, duration, and liquidity risk. In our model, the first two risks are captured by credit rating and duration (OAD). Two additional variables act as proxies for liquidity risk: par amount outstanding and a dummy variable for whether the issue is 144A-for-life. The resulting factor weights are shown in Figure 2. As expected, larger bonds pay less than smaller bonds, holding all else equal – 45bp less per \$1bn in par outstanding, on average, at current levels – partly accounting for the liquidity premium. Similarly, the market price of one year of incremental duration and a one-notch decline in rating are currently worth 17bp and 55bp, respectively. The additional compensation garnered for a 144A-for-life issue has declined a lot over the past two years and is now 46bp.

Using the same model, we can easily calculate a “fair value” spread given the size, duration, rating, and placement market of every bond in the Barclays U.S. High Yield Index. Bonds with traded spreads above the model are cheap to fair value under the model, and vice versa. Admittedly, the model captures only about 40-50% of the cross-sectional variation in spreads in any given quarter, so there are clearly other risks at play. However, we find the difference in the traded spread and the model-implied spread to be a strong predictor of future performance relative to the index.

To illustrate this predictive relationship, we computed the difference in traded and model spreads for all bonds in the U.S. High Yield Index for every quarter-end from 2002 through 2013. We then examined median returns in the following quarter and 12-month period, conditional on the starting traded-to-model spread delta. The results, in Figures 3 and 4, show clear outperformance for bonds trading cheap and underperformance for those trading rich. We note that 2008-09 is excluded from the analysis because of the extreme values, although the results are equally strong with the crisis period included. Also, all performance is relative to the U.S. High Yield Index over the same period. Finally, bonds with an OAS above 1,500bp are excluded.

Applying the model to the current index helps us identify the most compelling long and short trades in the high yield market at current levels. The list of bonds in Figures 5 and 6 represents

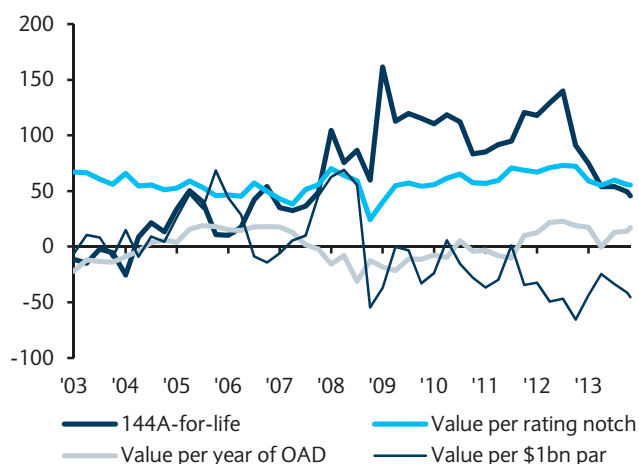
FIGURE 1
Cash and CDS Movers

High Yield Cash					
Best	Px	Chg	Worst	Px	Chg
NEWALB 7.75 '26	81.75	+5.5	GYI 7 '20	78.50	-3.0
RF 6.75 '25	107.12	+0.2	VRS 8.75 '19	50.00	-3.0
HXN 7.875 '23	89.50	-0.5	JNY 6.125 '34	80.50	-2.8

High Yield CDS					
Best	5y	Chg	Worst	5y	Chg
RRI	2.9 pts	-2.8 pts	BOMB	314 bp	+44 bp
SRAC	25.4 pts	-2.2 pts	AKS	8.0 pts	+1.5 pts
MBIA	10.4 pts	-1.5 pts	AMD	490 bp	+28 bp

Source: Barclays Research

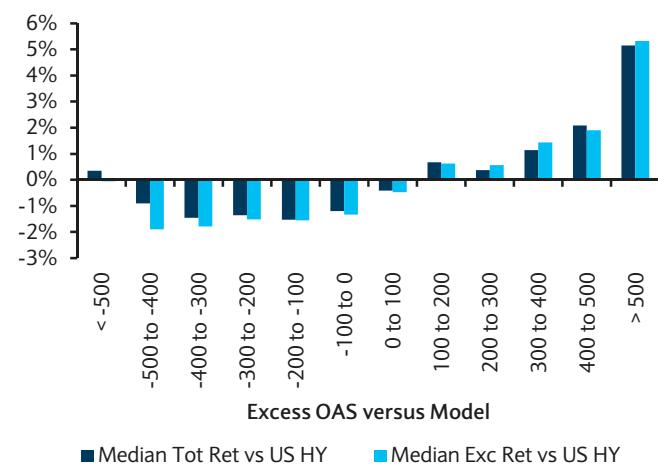
FIGURE 2
Spread Compensation for Different Risk Factors



Note: Excludes bonds with OAS greater than 1,500bp. Source: Barclays Research

FIGURE 3

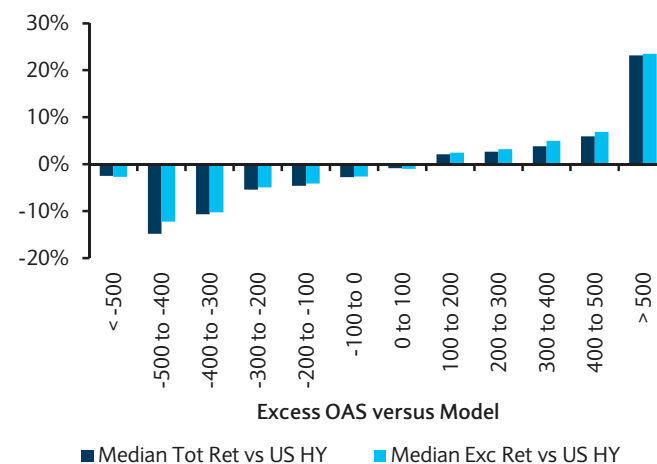
Next-Quarter Return versus U.S. High Yield, by Spread Delta versus Model



Note: Excludes bonds with OAS greater than 1,500bp. Source: Barclays Research

FIGURE 4

Next 12-Month Return versus U.S. High Yield, by Spread Delta versus Model



Note: Excludes bonds with OAS greater than 1,500bp. Source: Barclays Research

the top 25 long and short candidates based on the model. We limit the universe to rated names, adding a fundamental overlay by excluding bonds that the model considers “cheap” if the fundamental analyst is Underweight, as well as “rich” names that are rated Overweight.

On the long side, many of the credits that appear cheap to the model confirm our views from last week’s focus article, *It’s Worth Getting Stressed*. In a year of low expected returns, investors will need to take a view on wider-spread names to outperform. Investors will also benefit from avoiding (or shorting) names that do not provide adequate compensation for the risks. The list in Figure 6 includes a handful of credits that are very sensitive to the housing market (e.g. Beazer, HD Supply). While we don’t expect a material disruption in the housing recovery, the model suggests that a full recovery may already be priced in. Many of the other names on the short list (e.g. Intelsat, Rite Aid, MGM, Freescale) are very highly leveraged credits, and while some have shown some positive trends, current spreads do not leave much room for error, in our view.

FIGURE 5

Top-25 Long Candidates in U.S. High Yield Index Based on Differential to Fair Value and Fundamental Overlay

Ticker	Issuer	Par (\$mn)	Coupon (%)	Mat.	Price (\$)	YTW (%)	OAS (bp)	OAD (yrs)	Rating	Placement	Model Spread (bp)	Excess Spread (bp)	Analyst Rating
ACI	Arch Coal	375	9.875	Jun-19	90.13	12.44	1,038	4.21	CAA1	Registered	514	524	Market Weight
ACI	Arch Coal	1,000	7.000	Jun-19	80.00	12.16	1,007	4.46	CAA1	Registered	489	518	Market Weight
WLT	Walter Energy	500	9.875	Dec-20	84.50	13.38	1,090	4.94	CAA2	Registered	576	515	Market Weight
ACI	Arch Coal	500	7.250	Oct-20	78.75	11.95	953	5.12	CAA1	Registered	523	430	Market Weight
ACI	Arch Coal	1,000	7.250	Jun-21	77.50	11.91	934	5.59	CAA1	Registered	509	426	Market Weight
VISANT	Visant	737	10.000	Oct-17	97.25	10.91	949	3.00	CAA2	Registered	532	417	Overweight
AVYA	Avaya	1,384	10.500	Mar-21	95.50	11.44	901	4.87	CAA1	144A-for-life	525	377	Market Weight
FDC	First Data Corp	1,750	11.750	Aug-21	105.38	10.40	809	4.47	CAA2	144A	511	298	Market Weight
FDC	First Data Corp	3,000	12.625	Jan-21	117.75	8.60	649	3.76	CAA1	Registered	387	262	Market Weight
CLE	Claire's Stores	260	10.500	Jun-17	101.50	9.28	842	1.81	CAA3	Registered	589	253	Market Weight
FDC	First Data Corp	725	11.750	Aug-21	105.38	10.40	809	4.48	CAA2	144A	558	252	Market Weight
GTIV	Gentiva	325	11.500	Sep-18	105.50	9.07	786	2.51	CAA2	Registered	542	244	Overweight

Ticker	Issuer	Par (\$mn)	Coupon (%)	Mat.	Price (\$)	YTW (%)	OAS (bp)	OAD (yrs)	Rating	Placement	Model Spread (bp)	Excess Spread (bp)	Analyst Rating
XL	XL Capital	1,000	6.500	Apr-17	98.50	7.02	313	2.20	BA1	Registered	119	194	Market Weight
CLE	Claire's Stores	320	7.750	Jun-20	87.75	10.43	817	4.98	CAA2	144A-for-life	630	187	Market Weight
KCI	Kinetic Concepts	612	12.500	Nov-19	113.50	7.56	656	2.47	CAA1	Registered	473	183	Overweight
S	Sprint	4,250	7.875	Sep-23	108.50	6.66	391	6.95	B1	144A	218	173	Overweight
CLE	Claire's Stores	450	8.875	Mar-19	98.75	9.18	727	3.86	CAA2	Registered	560	168	Market Weight
PPL	PPL Capital	480	6.700	Mar-17	101.25	6.26	308	2.27	BA1	Registered	144	164	Market Weight
EEP	Enbridge Energy	400	8.050	Oct-17	112.17	4.44	326	3.22	BA1	Registered	164	162	Market Weight
FDC	First Data Corp	785	11.250	Jan-21	111.25	8.43	640	3.95	CAA1	144A	490	150	Market Weight
HXN	Hexion Finance	1,145	8.875	Feb-18	104.38	7.20	580	1.43	CAA1	Registered	431	149	Overweight
HKUS	Halcon Resources	750	9.750	Jul-20	104.63	8.49	645	4.43	CAA1	Registered	500	144	Overweight
XCO	Exco Resources	750	7.500	Sep-18	98.00	8.02	630	3.61	CAA1	Registered	486	143	Market Weight
PSD	Puget Energy	250	6.974	Jun-17	102.50	6.13	300	2.76	BA1	Registered	162	138	Overweight
AVYA	Avaya	290	9.000	Apr-19	105.00	7.21	569	3.10	B2	144A-for-life	433	135	Market Weight

Note: Excludes unrated bonds, and bonds with OAS > 1,500bp. Source: Barclays Research

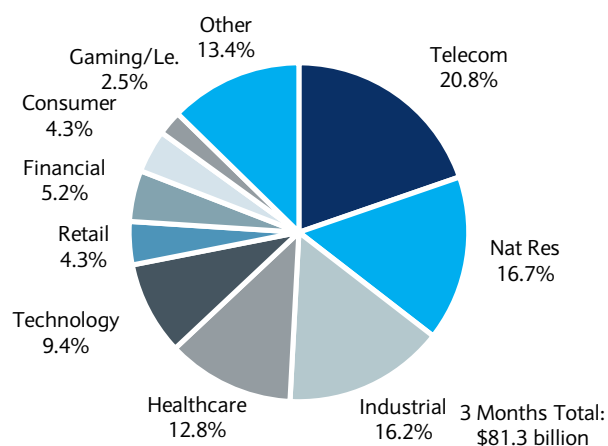
FIGURE 6

Top-25 Short Candidates in U.S. High Yield Index Based on Differential to Fair Value and Fundamental Overlay

Ticker	Issuer	Par (\$mn)	Coupon (%)	Mat.	Price (\$)	YTW (%)	OAS (bp)	OAD (yrs)	Rating	Placement	Model Spread (bp)	Excess Spread (bp)	Analyst Rating
BZH	Beazer Homes	173	8.125	Jun-16	111.38	3.15	254	2.22	CAA2	Registered	544	-290	Underweight
INTEL	Intelsat Lux.	500	6.750	Jun-18	107.00	3.85	297	2.29	CAA2	144A	530	-233	Market Weight
INTEL	Intelsat Jackson	635	6.625	Dec-22	104.50	5.82	311	6.05	CAA1	144A	533	-223	Market Weight
INTEL	Intelsat Jackson	640	6.625	Dec-22	104.50	5.82	311	6.05	CAA1	Registered	533	-222	Market Weight
ALUFP	Lucent Tech	650	4.625	Jul-17	101.37	4.19	309	3.22	CAA1	144A-for-life	530	-221	Market Weight
BZH	Beazer Homes	200	7.500	Sep-21	104.25	6.58	419	5.19	CAA2	144A-for-life	639	-221	Underweight
RAD	Rite Aid	295	7.700	Feb-27	102.75	7.37	424	8.34	CAA2	Registered	643	-219	Market Weight
RAD	Rite Aid	810	6.750	Jun-21	106.88	5.27	296	4.90	CAA1	Registered	506	-209	Market Weight
TPX	Tempur-Pedic	375	6.875	Dec-20	109.50	4.46	259	4.29	B3	Registered	460	-201	Market Weight
BZH	Beazer Homes	200	7.250	Feb-23	102.00	6.89	413	5.96	CAA2	Registered	607	-194	Underweight
INTEL	Intelsat Lux.	1,000	8.125	Jun-23	109.50	6.41	377	5.81	CAA2	144A	568	-191	Market Weight
CEQUEL	Cequel Comm.	750	5.125	Dec-21	95.00	5.93	334	6.16	B3	144A-for-life	520	-186	Market Weight
FSL	Freescall Semi	500	5.000	May-21	98.00	5.33	286	5.76	B2	144A-for-life	469	-183	Market Weight
HDSUPP	HD Supply	1,275	7.500	Jul-20	108.50	5.40	345	4.09	CAA2	Registered	526	-181	Underweight
ALUFP	Lucent Tech.	300	6.500	Jan-28	91.25	7.52	430	9.24	CAA1	Registered	603	-173	Market Weight
MTW	Manitowoc	300	5.875	Oct-22	102.75	5.38	265	6.02	B2	Registered	437	-173	Market Weight
MGM	MGM Resorts	500	10.000	Nov-16	121.00	2.15	140	2.48	B1	Registered	312	-172	Market Weight
JAH	Jarden	650	7.500	May-17	115.88	2.42	145	2.95	B1	Registered	314	-169	Market Weight
PF	Pinnacle Foods	350	4.875	May-21	95.50	5.64	320	5.81	B3	144A	487	-167	Market Weight
MGM	MGM Mirage	238	6.875	Apr-16	110.25	2.06	155	2.04	B1	Registered	317	-162	Market Weight
ALUFP	Lucent Tech.	1,360	6.450	Mar-29	92.25	7.30	402	9.51	CAA1	Registered	559	-157	Market Weight
MGM	MGM Mirage	733	7.500	Jun-16	112.50	2.04	145	2.19	B1	Registered	297	-152	Market Weight
INTEL	Intelsat Jackson	1,150	7.500	Apr-21	111.00	3.86	260	3.33	B3	Registered	408	-148	Market Weight
POST	Post Holdings	525	6.750	Dec-21	105.75	5.58	317	5.53	B2	144A-for-life	464	-147	Underweight
INTEL	Intelsat Lux.	2,000	7.750	Jun-21	109.00	5.77	358	4.74	CAA2	144A	504	-146	Market Weight

Note: Excludes unrated bonds, and bonds with OAS > 1,500bp. Source: Barclays Research

High Yield Supply by Sector – Last Three Months Breakdown



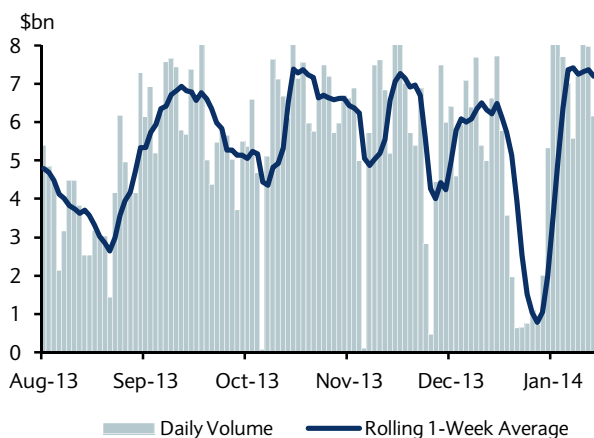
Source: Barclays Research

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

	Notional Outstanding (\$bn)		Volume – Week Ending 1/17/13 (\$mn)
	Gross	Net	Gross
Caesars Ent.	23.9	1.9	716.6
J. C. Penney	24.5	1.7	617.2
RadioShack	17.2	0.9	591.9
R.R. Donnelley	22.9	1.2	511.0
Clear Channel	17.8	1.0	417.1
Ally Financial	19.4	1.0	299.6
Dell	13.9	1.2	264.7
The Jones Group	19.8	0.8	236.5
Centurylink	18.5	1.1	226.0
MGM Resorts Intl.	11.0	0.8	217.8

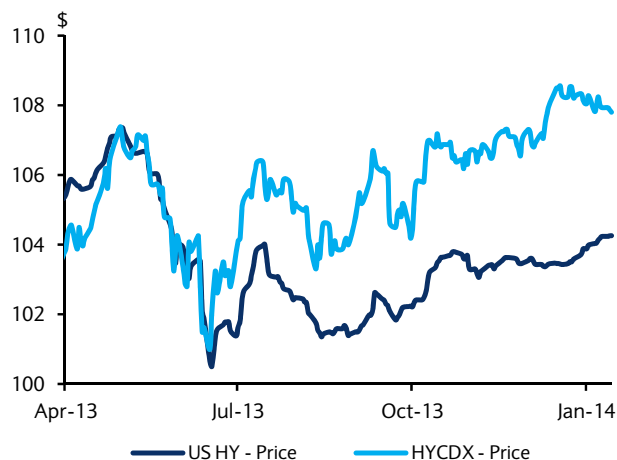
Source: Barclays Research

High Yield Average Institutional Trade Volume



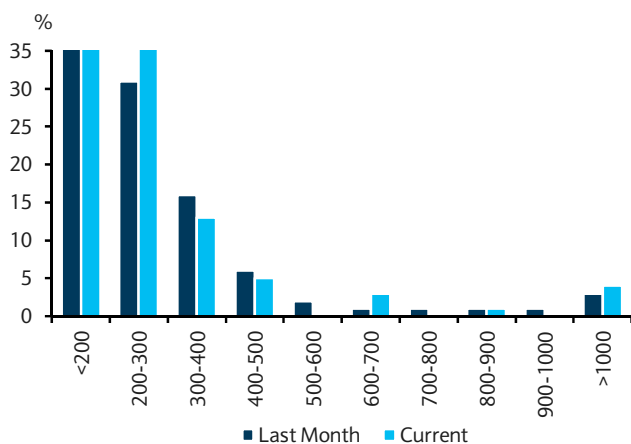
Source: Barclays Research

On-the-Run HYCDX versus U.S. High Yield Index



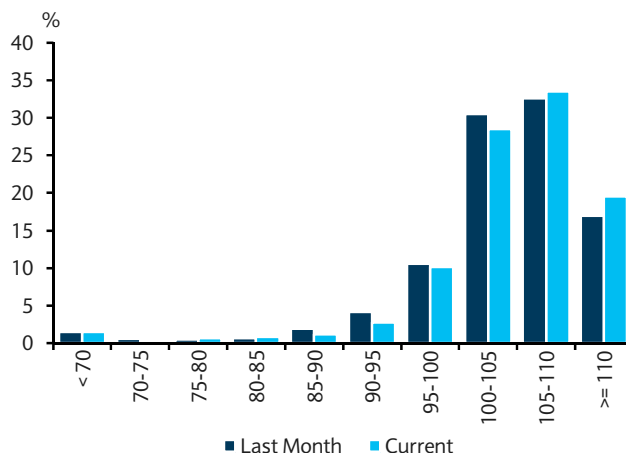
Source: Barclays Research

On-the-Run HYCDX Spread Distribution



Source: Barclays Research

High Yield Index Price Distribution by Par



Source: Barclays Research

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Market Weight: The analyst expects the six-month total return of the rated debt security or instrument to be in line with the six-month expected total return of the Barclays U.S. 2% Issuer Capped High Yield Credit Index, the Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, or the EM Asia USD High Yield Corporate Credit Index, as applicable.

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