

## US Corporate High Yield Basis Report

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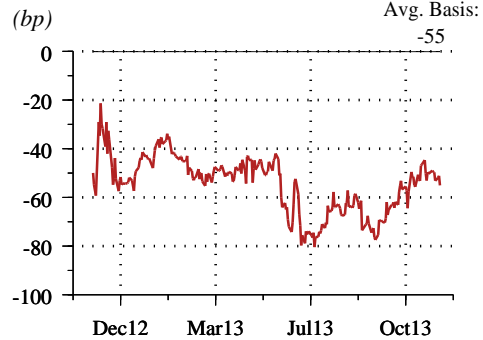
Source for all charts and tables in this report: J.P. Morgan

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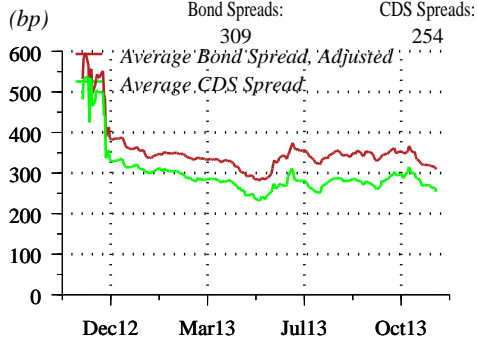
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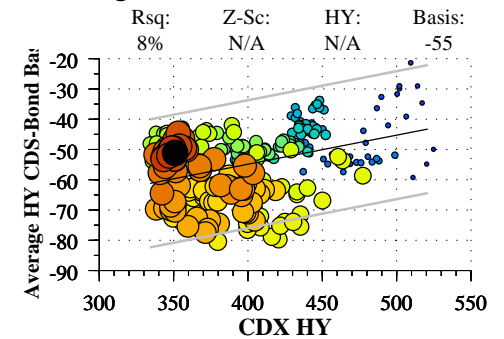
Average High Yield CDS-Bond Basis



Average Adjusted Bond Spreads and Average CDS Spreads



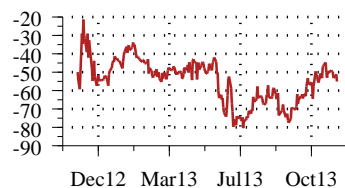
Average HY CDS-Bond Basis vs. CDX.HY



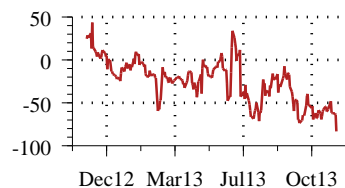
		Avg. Price	Avg. Z-Spread			Avg. PECs			Avg. Interp CDS			Avg CDS-Bond Basis				
	# Bonds	Current	Current	1D Ago	1W Ago	Current	1D Ago	1W Ago	Current	1D Ago	1W Ago	Current	1D Ago	1W Ago	1M Ago	3M Ago
Avg HY CDS-Bond Basis Summary																
ALL	117	109.25	318	323	328	309	315	320	254	264	271	-55	-51	-50	-58	-64
Avg HY CDS-Bond Basis By Industry																
AUTO	5	112.04	306	304	303	299	298	296	216	234	235	-83	-64	-62	-66	-33
BASIC MATERIALS	10	109.09	270	270	273	262	263	266	175	180	183	-88	-84	-83	-68	-37
CONSUMER RETAIL	28	107.81	445	465	475	436	460	470	452	475	494	16	15	24	-9	-80
ENERGY	9	111.71	257	254	256	249	246	248	173	173	175	-76	-73	-73	-81	-57
FINANCIAL	15	108.93	259	257	267	249	248	256	165	165	167	-84	-83	-89	-95	-66
BANKS, SAVINGS AND LOANS	3	108.94	250	245	255	243	238	247	210	210	216	-33	-29	-31	-22	-64
DIVERSIFIED	3	108.72	303	305	308	292	294	297	215	215	219	-77	-79	-78	-73	-66
INSURANCE	3	110.33	219	218	247	209	210	236	135	135	137	-75	-74	-99	-114	-87
REAL ESTATE REITS	6	108.32	261	259	262	250	249	251	132	133	132	-118	-116	-119	-130	-58
HEALTHCARE AND PHARMS	7	111.08	201	201	199	191	191	189	102	102	105	-88	-89	-85	-69	-79
HOMEBUILDERS	17	109.51	240	245	236	233	239	230	145	151	153	-88	-88	-76	-92	-94
INDUSTRIALS	3	112.60	259	247	260	251	240	252	146	147	148	-105	-93	-104	-42	-37
MEDIA	12	105.81	444	441	471	429	427	453	377	397	399	-52	-30	-54	-37	-15
TECHNOLOGY	1	113.14	146	134	133	142	130	129	72	72	72	-70	-58	-57	-44	-97
TELECOMM	9	110.37	275	276	277	268	270	271	210	215	223	-58	-55	-47	-66	-63
UTILITIES	2	114.27	186	187	189	180	181	183	116	115	116	-64	-66	-67	-52	-51
Avg HY CDS-Bond Basis By Rating																
CROSSOVER	10	111.46	230	225	233	222	218	225	97	95	108	-125	-122	-118	-113	-89
BB	62	111.31	231	231	229	224	224	222	148	151	152	-76	-73	-70	-67	-55
B	29	110.48	299	299	305	293	293	298	219	226	227	-73	-67	-71	-84	-75
CCC-C	16	97.69	743	785	814	723	770	799	825	878	910	102	109	111	59	-59
Avg HY CDS-Bond Basis By Tenor																
18M-4Y	78	108.54	299	305	311	289	297	302	235	246	254	-54	-51	-48	-64	-82
4Y-6Y	31	110.57	357	359	366	351	354	362	300	310	314	-51	-44	-47	-39	-31
6Y-8Y	8	111.15	351	352	352	341	341	341	255	265	266	-86	-76	-75	-74	-38

## US Corporate High Yield: Average Basis Charts

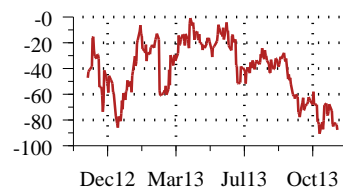
*ALL*



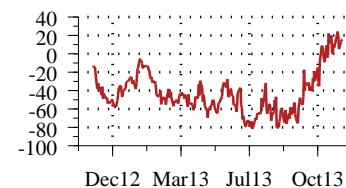
*SECTOR\_AUTO*



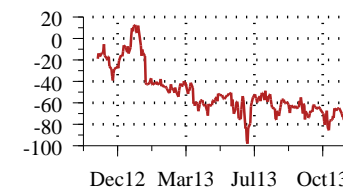
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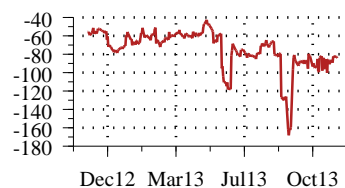
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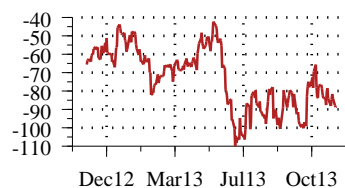
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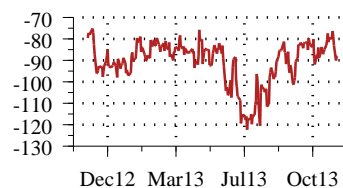
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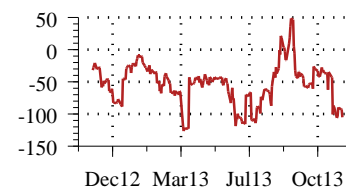
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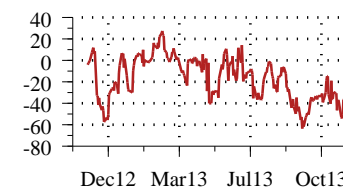
*SECTOR\_HOMEBUILDERS*



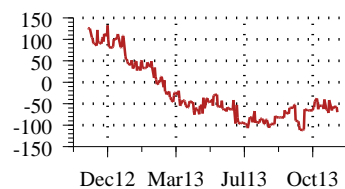
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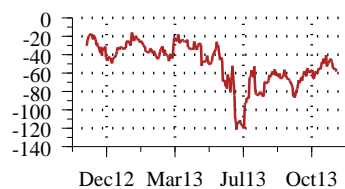
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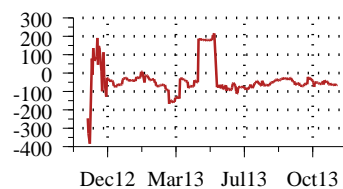
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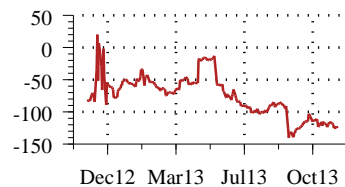
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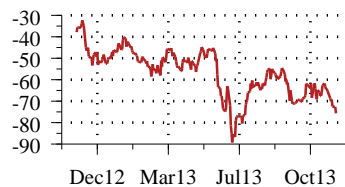
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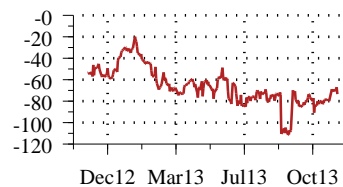
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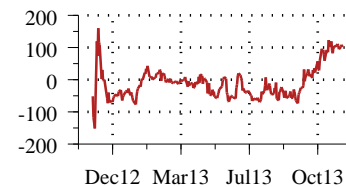
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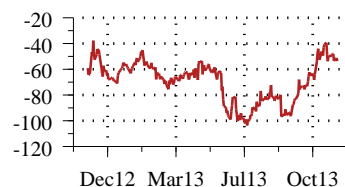
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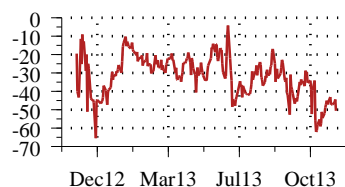
*RATING\_CCC\_C*



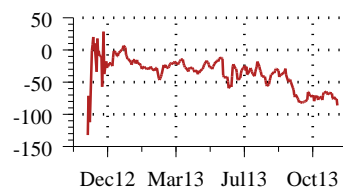
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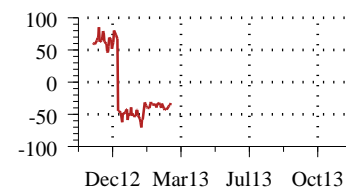
*TENOR\_4Y-6Y*



*TENOR\_6Y-8Y*



*TENOR\_8Y-10Y*



## Most Positive and Negative Basis Opportunities for High Yield Bonds (Sorted by Basis Level)<sup>1</sup>

	Bond Valuation Measures								Bond-CDS Comparison							CDS Amnt for = Risk	Memo: 5YR CDS Sprd
	Cpn	Maturity	Outst. \$mm	Close Price	Sprd to Bm	Sprd to Swaps (Isprd)	Sprd to Swaps (Zsprd)	Par Equiv. CDS Sprd (A)	CDS Sprd (to Bond Maturity) (B)	BASIS Positive= CDS Cheap (B-A)	1 Mth Avg. Basis	3 Mth Avg. Basis	Z-score vs. 3 Mth	BASIS % of Spread			
MOST POSITIVE BASIS																	
JC PENNEY CORP	5.750	Feb 15, 2018	300	83.37	939	963	968	1003	1215	212	122	21	1.5	21%	0.75	1206	
KNIGHT RIDDER	5.750	Sep 01, 2017	261	103.41	339	383	385	375	554	179	232	211	0.6	48%	1.06	675	
CLEAR CHANNEL	6.875	Jun 15, 2018	175	88.21	881	891	898	858	997	139	131	108	0.5	16%	0.88	1026	
JC PENNEY CORP	7.950	Apr 01, 2017	285	87.85	1113	1173	1176	1178	1230	52	12	-71	1.2	4%	0.83	1206	
HBOS PLC	6.750	May 21, 2018	2000	112.38	237	250	256	250	274	24	25	-56	-0.2	10%	1.18	291	
CSC HOLDINGS INC	7.625	Jul 15, 2018	500	115.25	263	270	277	272	283	10	20	23	-0.0	4%	1.29	305	
CLEAR CHANNEL	5.500	Dec 15, 2016	250	89.28	908	898	899	857	860	4	36	-20	0.3	0%	0.89	1026	
GOODYEAR TIRE	8.750	Aug 15, 2020	282	116.64	294	366	382	375	371	-4	6	10	0.6	-1%	1.31	285	
FRONTIER COMM	8.125	Oct 01, 2018	583	115.54	316	313	322	315	310	-5	-6	-4	0.6	-2%	1.29	319	
CHESAPEAKE ENRGY	6.875	Nov 15, 2020	499	111.97	204	268	281	274	254	-20	-22	2	1.2	-7%	1.23	202	
SMITHFIELD FOODS	7.750	Jul 01, 2017	497	116.99	140	190	194	190	169	-21	-10	-25	-0.9	-11%	1.32	255	
FRONTIER COMM	7.125	Mar 15, 2019	434	109.11	378	357	366	359	337	-22	-9	-2	-0.2	-6%	1.18	319	
TOYS R US INC	7.375	Oct 15, 2018	400	80.12	1163	1159	1169	1186	1160	-26	-41	-48	0.9	-2%	0.70	1164	
CSC HOLDINGS INC	7.875	Feb 15, 2018	300	115.21	257	281	287	282	251	-30	-22	-16	-0.3	-11%	1.29	305	
ALCOA INC	5.720	Feb 23, 2019	750	107.05	285	266	273	268	237	-31	-36	-17	-0.3	-12%	1.14	226	
US STEEL CORP	6.050	Jun 01, 2017	450	107.17	249	302	305	297	266	-31	16	49	-1.8	-10%	1.14	426	
SPRINT CAP CORP	6.900	May 01, 2019	1729	107.83	387	361	370	362	325	-37	-24	-29	-0.4	-10%	1.15	304	
CABLEVISION SYS	8.000	Apr 15, 2020	500	111.65	300	383	397	390	350	-40	-22	-17	-1.0	-10%	1.23	305	
COMMERCIAL METAL LIMITED BRANDS	6.500	Jul 15, 2017	400	111.58	175	224	227	220	180	-40	-57	-65	1.3	-18%	1.22	259	
	6.900	Jul 15, 2017	700	115.52	106	155	158	154	112	-43	-55	-63	1.1	-28%	1.29	168	
MOST NEGATIVE BASIS																	
ENTERTAINMENT PR	7.750	Jul 15, 2020	250	115.09	228	300	314	294	50	-244	-239	-252	0.6	-83%	1.28	50	
PACTIV LLC	8.125	Jun 15, 2017	300	107.14	451	503	507	490	271	-220	-256	-239	1.7	-45%	1.15	381	
SONAT INC	7.000	Feb 01, 2018	82	109.15	321	347	352	340	160	-180	-197	-204	2.1	-53%	1.18	190	
US WEST CAP	6.500	Nov 15, 2018	174	109.41	302	294	301	294	142	-153	-157	-151	0.7	-52%	1.18	142	
OWENS-ILL INC	7.800	May 15, 2018	250	115.07	272	286	292	286	146	-140	-138	-105	-0.1	-49%	1.28	165	
COOPER TIRE&RUBR	8.000	Dec 15, 2019	174	103.10	600	550	564	554	416	-138	-73	-11	-1.4	-25%	1.09	372	
DILLARDS INC	6.625	Jan 15, 2018	87	111.74	222	247	251	245	116	-130	-122	-111	-0.3	-53%	1.22	153	
FRESENIUS MED	6.875	Jul 15, 2017	500	114.15	140	189	192	179	50	-129	-138	-155	-0.1	-72%	1.26	50	
DONNELLEY & SONS	6.125	Jan 15, 2017	251	107.98	206	273	275	268	140	-127	-77	-44	-1.6	-48%	1.16	280	
SUNOCO INC	5.750	Jan 15, 2017	400	110.17	101	168	170	165	43	-122	-98	-115	-0.7	-74%	1.19	66	
DEAN FOODS CO	6.900	Oct 15, 2017	142	109.59	284	322	326	318	198	-121	-144	-141	2.0	-38%	1.19	270	
K HOVNANIAN ENTR	8.625	Jan 15, 2017	121	109.67	388	455	458	447	333	-115	-144	-131	0.1	-26%	1.15	503	
SERVICE CORP INT	7.625	Oct 01, 2018	250	115.45	272	269	277	269	154	-114	-121	-104	-0.2	-43%	1.29	158	
FIRST IND LP	5.950	May 15, 2017	102	106.90	245	300	303	293	186	-107	-98	-99	1.5	-37%	1.14	241	
ISTAR FINANCIAL	5.850	Mar 15, 2017	100	105.70	263	324	327	314	211	-104	-102	-104	0.5	-33%	1.17	313	
DILLARDS INC	7.130	Aug 01, 2018	162	114.65	234	238	245	240	142	-99	-107	-87	-0.6	-41%	1.27	153	
FAIRFAX FINL HLD	7.375	Apr 15, 2018	144	114.68	239	253	259	249	150	-99	-92	-88	-0.4	-40%	1.28	164	
EL PASO CORP	7.250	Jun 01, 2018	477	113.39	262	274	280	272	174	-98	-98	-94	-0.2	-36%	1.25	190	
EL PASO CORP	6.500	Sep 15, 2020	349	107.71	235	304	316	310	217	-93	-104	-109	1.1	-30%	1.16	190	
PULTE CORP	7.625	Oct 15, 2017	150	115.00	229	249	254	245	152	-93	-74	-56	-1.4	-38%	1.28	193	

<sup>1</sup> For bonds between 3 yrs and 10.25 yrs to maturity that have Par Equivalent CDS Spread above 10bps.

## Most Positive and Negative Basis Opportunities for High Yield Bonds (Sorted by Basis as Percentage of Spread)<sup>1</sup>

					Bond Valuation Measures				Bond-CDS Comparison								CDS	Memo:
					Sprd	Sprd	Sprd	Par		CDS	BASIS	1 Mth	3 Mth	Z-score	BASIS	CDS		
					to	to	to	Equiv.		Sprd	Positive=	Avg.	Avg.	vs.	% of	Amnt	5YR	
	Cpn	Maturity	Outst.	Close	Bm	Swaps	Swaps	CDS	Sprd	(to Bond Maturity)	CDS Cheap	Basis	Basis	3 Mth	Spread	for =	CDS	
			\$mm	Price		(Isprd)	(Zsprd)	(A)	(B)		(B-A)					Risk	Sprd	
MOST POSITIVE BASIS AS % OF SPREAD																		
KNIGHT RIDDER	5.750	Sep 01, 2017	261	103.41	339	383	385	375	554	179	232	211	0.6	48%	1.06	675		
JC PENNEY CORP	5.750	Feb 15, 2018	300	83.37	939	963	968	1003	1215	212	122	21	1.5	21%	0.75	1206		
CLEAR CHANNEL	6.875	Jun 15, 2018	175	88.21	881	891	898	858	997	139	131	108	0.5	16%	0.88	1026		
HBOS PLC	6.750	May 21, 2018	2000	112.38	237	250	256	250	274	24	25	-56	-0.2	10%	1.18	291		
CSC HOLDINGS INC	7.625	Jul 15, 2018	500	115.25	263	270	277	272	283	10	20	23	-0.0	4%	1.29	305		
JC PENNEY CORP	7.950	Apr 01, 2017	285	87.85	1113	1173	1176	1178	1230	52	12	-71	1.2	4%	0.83	1206		
CLEAR CHANNEL	5.500	Dec 15, 2016	250	89.28	908	898	899	857	860	4	36	-20	0.3	0%	0.89	1026		
GOODYEAR TIRE	8.750	Aug 15, 2020	282	116.64	294	366	382	375	371	-4	6	10	0.6	-1%	1.31	285		
FRONTIER COMM	8.125	Oct 01, 2018	583	115.54	316	313	322	315	310	-5	-6	-4	0.6	-2%	1.29	319		
TOYS R US INC	7.375	Oct 15, 2018	400	80.12	1163	1159	1169	1186	1160	-26	-41	-48	0.9	-2%	0.70	1164		
FRONTIER COMM	7.125	Mar 15, 2019	434	109.11	378	357	366	359	337	-22	-9	-2	-0.2	-6%	1.18	319		
CHESAPEAKE ENRGY	6.875	Nov 15, 2020	499	111.97	204	268	281	274	254	-20	-22	2	1.2	-7%	1.23	202		
CABLEVISION SYS	8.000	Apr 15, 2020	500	111.65	300	383	397	390	350	-40	-22	-17	-1.0	-10%	1.23	305		
SPRINT CAP CORP	6.900	May 01, 2019	1729	107.83	387	361	370	362	325	-37	-24	-29	-0.4	-10%	1.15	304		
US STEEL CORP	6.050	Jun 01, 2017	450	107.17	249	302	305	297	266	-31	16	49	-1.8	-10%	1.14	426		
CSC HOLDINGS INC	7.875	Feb 15, 2018	300	115.21	257	281	287	282	251	-30	-22	-16	-0.3	-11%	1.29	305		
SMITHFIELD FOODS	7.750	Jul 01, 2017	497	116.99	140	190	194	190	169	-21	-10	-25	-0.9	-11%	1.32	255		
ALCOA INC	5.720	Feb 23, 2019	750	107.05	285	266	273	268	237	-31	-36	-17	-0.3	-12%	1.14	226		
US STEEL CORP	7.000	Feb 01, 2018	500	107.62	360	386	391	380	327	-54	5	64	-2.1	-14%	1.16	426		
KB HOME	7.250	Jun 15, 2018	300	109.66	350	360	367	358	301	-57	-54	-44	0.4	-16%	1.19	328		
MOST NEGATIVE BASIS AS % OF SPREAD																		
ENTERTAINMENT PR	7.750	Jul 15, 2020	250	115.09	228	300	314	294	50	-244	-239	-252	0.6	-83%	1.28	50		
SUNOCO INC	5.750	Jan 15, 2017	400	110.17	101	168	170	165	43	-122	-98	-115	-0.7	-74%	1.19	66		
FRESENIUS MED	6.875	Jul 15, 2017	500	114.15	140	189	192	179	50	-129	-138	-155	-0.1	-72%	1.26	50		
COVENTRY HEALTH	5.950	Mar 15, 2017	383	114.07	21	82	84	81	32	-49	-40	-43	0.3	-61%	1.26	40		
TRW AUTOMOTIVE	7.250	Mar 15, 2017	441	115.12	110	171	174	169	77	-92	-82	-92	0.4	-54%	1.28	127		
DILLARDS INC	6.625	Jan 15, 2018	87	111.74	222	247	251	245	116	-130	-122	-111	-0.3	-53%	1.22	153		
SONAT INC	7.000	Feb 01, 2018	82	109.15	321	347	352	340	160	-180	-197	-204	2.1	-53%	1.18	190		
US WEST CAP	6.500	Nov 15, 2018	174	109.41	302	294	301	294	142	-153	-157	-151	0.7	-52%	1.18	142		
CONSTELLATION BR	7.250	May 15, 2017	700	116.15	102	157	160	156	79	-77	-58	-71	-2.6	-49%	1.30	125		
OWENS-ILL INC	7.800	May 15, 2018	250	115.07	272	286	292	286	146	-140	-138	-105	-0.1	-49%	1.28	165		
DONNELLEY & SONS	6.125	Jan 15, 2017	251	107.98	206	273	275	268	140	-127	-77	-44	-1.6	-48%	1.16	280		
TYSON FOODS INC	7.000	May 01, 2018	120	118.22	126	141	147	144	77	-67	-58	-60	-1.0	-47%	1.33	89		
PACTIV LLC	8.125	Jun 15, 2017	300	107.14	451	503	507	490	271	-220	-256	-239	1.7	-45%	1.15	381		
SERVICE CORP INT	7.625	Oct 01, 2018	250	115.45	272	269	277	269	154	-114	-121	-104	-0.2	-43%	1.29	158		
DILLARDS INC	7.130	Aug 01, 2018	162	114.65	234	238	245	240	142	-99	-107	-87	-0.6	-41%	1.27	153		
FAIRFAX FINL HLD	7.375	Apr 15, 2018	144	114.68	239	253	259	249	150	-99	-92	-88	-0.4	-40%	1.28	164		
PULTE CORP	7.625	Oct 15, 2017	150	115.00	229	249	254	245	152	-93	-74	-56	-1.4	-38%	1.28	193		
DEAN FOODS CO	6.900	Oct 15, 2017	142	109.59	284	322	326	318	198	-121	-144	-141	2.0	-38%	1.19	270		
FIRST IND LP	5.950	May 15, 2017	102	106.90	245	300	303	293	186	-107	-98	-99	1.5	-37%	1.14	241		
CENTURYLINK INC	6.000	Apr 01, 2017	500	109.61	161	220	222	217	140	-77	-67	-82	0.1	-36%	1.19	226		

<sup>1</sup> For bonds between 3 yrs and 10.25 yrs to maturity that have Par Equivalent CDS Spread above 10bps.

## Most Positive and Negative Basis Opportunities for High Yield Bonds (Sorted by Basis by Sectors)<sup>1</sup>

				Bond Valuation Measures				Bond-CDS Comparison								
				Sprd	Sprd to	Sprd to	Par	CDS	BASIS					CDS	Memo:	
				to	Swaps	Swaps	Equiv.	Sprd	Positive=	1 Mth	3 Mth	Z-score	BASIS	Amnt	5YR	
				Bm	(Isprd)	(Zsprd)	CDS Sprd	(to Bond Maturity)	CDS Cheap	Avg.	Avg.	vs.	% of	for =	CDS	
Cpn	Maturity	\$mm	Close Price	Bm	(Isprd)	(Zsprd)	(A)	(B)	(B-A)	Basis	Basis	3 Mth	Spread	Risk	Sprd	

### AUTO

#### MOST POSITIVE BASIS

GOODYEAR TIRE	8.750	Aug 15, 2020	282	116.64	294	366	382	375	371	-4	6	10	0.6	-1%	1.31	285
TRW AUTOMOTIVE	7.250	Mar 15, 2017	441	115.12	110	171	174	169	77	-92	-82	-92	0.4	-54%	1.28	127
COOPER TIRE&RUBR	8.000	Dec 15, 2019	174	103.10	600	550	564	554	416	-138	-73	-11	-1.4	-25%	1.09	372

#### MOST NEGATIVE BASIS

COOPER TIRE&RUBR	8.000	Dec 15, 2019	174	103.10	600	550	564	554	416	-138	-73	-11	-1.4	-25%	1.09	372
TRW AUTOMOTIVE	7.250	Mar 15, 2017	441	115.12	110	171	174	169	77	-92	-82	-92	0.4	-54%	1.28	127
GOODYEAR TIRE	8.750	Aug 15, 2020	282	116.64	294	366	382	375	371	-4	6	10	0.6	-1%	1.31	285

### BASIC MATERIALS

#### MOST POSITIVE BASIS

ALCOA INC	5.720	Feb 23, 2019	750	107.05	285	266	273	268	237	-31	-36	-17	-0.3	-12%	1.14	226
US STEEL CORP	6.050	Jun 01, 2017	450	107.17	249	302	305	297	266	-31	16	49	-1.8	-10%	1.14	426
COMMERCIAL METAL	6.500	Jul 15, 2017	400	111.58	175	224	227	220	180	-40	-57	-65	1.3	-18%	1.22	259
US STEEL CORP	7.000	Feb 01, 2018	500	107.62	360	386	391	380	327	-54	5	64	-2.1	-14%	1.16	426

#### MOST NEGATIVE BASIS

US STEEL CORP	7.000	Feb 01, 2018	500	107.62	360	386	391	380	327	-54	5	64	-2.1	-14%	1.16	426
COMMERCIAL METAL	6.500	Jul 15, 2017	400	111.58	175	224	227	220	180	-40	-57	-65	1.3	-18%	1.22	259
US STEEL CORP	6.050	Jun 01, 2017	450	107.17	249	302	305	297	266	-31	16	49	-1.8	-10%	1.14	426
ALCOA INC	5.720	Feb 23, 2019	750	107.05	285	266	273	268	237	-31	-36	-17	-0.3	-12%	1.14	226

<sup>1</sup> For bonds between 3 yrs and 10.25 yrs to maturity that have Par Equivalent CDS Spread above 10bps.

## Most Positive and Negative Basis Opportunities for High Yield Bonds (Sorted by Basis by Sectors)<sup>1</sup>

					Bond Valuation Measures				Bond-CDS Comparison								
					Sprd	Sprd	Sprd	Par	CDS	BASIS					CDS	Memo:	
					to	to	to	Equiv.	Sprd	Positive=	1 Mth	3 Mth	Z-score	BASIS	Amnt	5YR	
					CDS Sprd	Swaps	Swaps	CDS	(to Bond Maturity)	CDS Cheap	Avg.	Avg.	vs.	% of	for =	CDS	
Cpn	Maturity	Outst.	Close	Sprd	to	to	to	Sprd	(B)	(B-A)	Basis	Basis	3 Mth	Spread	Risk	Sprd	
		\$mm	Price	Bm	(Isprd)	(Zsprd)	(A)										

### CONSUMER RETAIL

#### MOST POSITIVE BASIS

JC PENNEY CORP	5.750	Feb 15, 2018	300	83.37	939	963	968	1003	1215	<b>212</b>	122	21	1.5	21%	0.75	1206
JC PENNEY CORP	7.950	Apr 01, 2017	285	87.85	1113	1173	1176	1178	1230	<b>52</b>	12	-71	1.2	4%	0.83	1206
SMITHFIELD FOODS	7.750	Jul 01, 2017	497	116.99	140	190	194	190	169	<b>-21</b>	-10	-25	-0.9	-11%	1.32	255
TOYS R US INC	7.375	Oct 15, 2018	400	80.12	1163	1159	1169	1186	1160	<b>-26</b>	-41	-48	0.9	-2%	0.70	1164
LIMITED BRANDS	6.900	Jul 15, 2017	700	115.52	106	155	158	154	112	<b>-43</b>	-55	-63	1.1	-28%	1.29	168

#### MOST NEGATIVE BASIS

DILLARDS INC	6.625	Jan 15, 2018	87	111.74	222	247	251	245	116	<b>-130</b>	-122	-111	-0.3	-53%	1.22	153
DONNELLEY & SONS	6.125	Jan 15, 2017	251	107.98	206	273	275	268	140	<b>-127</b>	-77	-44	-1.6	-48%	1.16	280
DEAN FOODS CO	6.900	Oct 15, 2017	142	109.59	284	322	326	318	198	<b>-121</b>	-144	-141	2.0	-38%	1.19	270
SERVICE CORP INT	7.625	Oct 01, 2018	250	115.45	272	269	277	269	154	<b>-114</b>	-121	-104	-0.2	-43%	1.29	158
DILLARDS INC	7.130	Aug 01, 2018	162	114.65	234	238	245	240	142	<b>-99</b>	-107	-87	-0.6	-41%	1.27	153

### ENERGY

#### MOST POSITIVE BASIS

CHESAPEAKE ENRGY	6.875	Nov 15, 2020	499	111.97	204	268	281	274	254	<b>-20</b>	-22	2	1.2	-7%	1.23	202
CHESAPEAKE ENRGY	7.250	Dec 15, 2018	669	114.89	261	250	258	249	205	<b>-44</b>	-40	-7	0.0	-18%	1.28	202
EL PASO CORP	7.000	Jun 15, 2017	786	113.77	154	206	209	201	138	<b>-63</b>	-77	-94	0.9	-31%	1.26	190
CHESAPEAKE ENRGY	6.500	Aug 15, 2017	660	111.25	190	236	239	229	157	<b>-72</b>	-46	-26	-1.5	-31%	1.21	202
EL PASO CORP	6.500	Sep 15, 2020	349	107.71	235	304	316	310	217	<b>-93</b>	-104	-109	1.1	-30%	1.16	190

#### MOST NEGATIVE BASIS

SONAT INC	7.000	Feb 01, 2018	82	109.15	321	347	352	340	160	<b>-180</b>	-197	-204	2.1	-53%	1.18	190
SUNOCO INC	5.750	Jan 15, 2017	400	110.17	101	168	170	165	43	<b>-122</b>	-98	-115	-0.7	-74%	1.19	66
EL PASO CORP	7.250	Jun 01, 2018	477	113.39	262	274	280	272	174	<b>-98</b>	-98	-94	-0.2	-36%	1.25	190
EL PASO CORP	6.500	Sep 15, 2020	349	107.71	235	304	316	310	217	<b>-93</b>	-104	-109	1.1	-30%	1.16	190
CHESAPEAKE ENRGY	6.500	Aug 15, 2017	660	111.25	190	236	239	229	157	<b>-72</b>	-46	-26	-1.5	-31%	1.21	202

<sup>1</sup> For bonds between 3 yrs and 10.25 yrs to maturity that have Par Equivalent CDS Spread above 10bps.

## Most Positive and Negative Basis Opportunities for High Yield Bonds (Sorted by Basis by Sectors)<sup>1</sup>

				Bond Valuation Measures				Bond-CDS Comparison										CDS	Memo:
					Sprd	Sprd	Par		CDS	BASIS	1 Mth	3 Mth	Z-score	BASIS	CDS				
		Outst.	Close		Sprd	to	to	Equiv.	Sprd	Positive=	Avg.	Avg.	vs.	% of	Amnt	5YR			
	Cpn	\$mm	Price		to	Swaps	Swaps	CDS Sprd	(to Bond Maturity)	CDS Cheap	Basis	Basis	3 Mth	Spread	for =	CDS			
					Bm	(Isprd)	(Zsprd)	(A)	(B)	(B-A)					Risk	Sprd			
FINANCIAL																			
MOST POSITIVE BASIS																			
HBOS PLC	6.750	May 21, 2018	2000	112.38	237	250	256	250	274	24	25	-56	-0.2	10%	1.18	291			
ALLY FINANCIAL	6.250	Dec 01, 2017	1000	111.97	170	203	207	198	151	-47	-50	-59	0.8	-24%	1.34	181			
SLM CORP	8.450	Jun 15, 2018	2500	116.05	315	325	333	321	260	-61	-50	-41	-1.0	-19%	1.33	279			
ROYAL BK SCOTLND	4.700	Jul 03, 2018	350	102.45	275	283	287	280	205	-76	-47	-32	-0.6	-27%	1.05	214			
FAIRFAX FINL HLD	7.375	Apr 15, 2018	144	114.68	239	253	259	249	150	-99	-92	-88	-0.4	-40%	1.28	164			

## FINANCIAL

### MOST POSITIVE BASIS

HBOS PLC	6.750	May 21, 2018	2000	112.38	237	250	256	250	274	<b>24</b>	25	-56	-0.2	10%	1.18	291
ALLY FINANCIAL	6.250	Dec 01, 2017	1000	111.97	170	203	207	198	151	<b>-47</b>	-50	-59	0.8	-24%	1.34	181
SLM CORP	8.450	Jun 15, 2018	2500	116.05	315	325	333	321	260	<b>-61</b>	-50	-41	-1.0	-19%	1.33	279
ROYAL BK SCOTLND	4.700	Jul 03, 2018	350	102.45	275	283	287	280	205	<b>-76</b>	-47	-32	-0.6	-27%	1.05	214
FAIRFAX FINL HLD	7.375	Apr 15, 2018	144	114.68	239	253	259	249	150	<b>-99</b>	-92	-88	-0.4	-40%	1.28	164

### MOST NEGATIVE BASIS

ENTERTAINMENT PR	7.750	Jul 15, 2020	250	115.09	228	300	314	294	50	<b>-244</b>	-239	-252	0.6	-83%	1.28	50
FIRST IND LP	5.950	May 15, 2017	102	106.90	245	300	303	293	186	<b>-107</b>	-98	-99	1.5	-37%	1.14	241
ISTAR FINANCIAL	5.850	Mar 15, 2017	100	105.70	263	324	327	314	211	<b>-104</b>	-102	-104	0.5	-33%	1.17	313
FAIRFAX FINL HLD	7.375	Apr 15, 2018	144	114.68	239	253	259	249	150	<b>-99</b>	-92	-88	-0.4	-40%	1.28	164
ROYAL BK SCOTLND	4.700	Jul 03, 2018	350	102.45	275	283	287	280	205	<b>-76</b>	-47	-32	-0.6	-27%	1.05	214

## HEALTHCARE AND PHARMS

### MOST POSITIVE BASIS

COVENTRY HEALTH	5.950	Mar 15, 2017	383	114.07	21	82	84	81	32	<b>-49</b>	-40	-43	0.3	-61%	1.26	40
HEALTH NET INC	6.375	Jun 01, 2017	400	107.94	258	311	314	302	226	<b>-76</b>	-82	-91	0.6	-25%	1.16	284
HCA INC	6.500	Feb 15, 2020	3000	110.40	177	265	275	250	174	<b>-77</b>	-65	-82	0.1	-31%	1.48	153
FRESENIUS MED	6.875	Jul 15, 2017	500	114.15	140	189	192	179	50	<b>-129</b>	-138	-155	-0.1	-72%	1.26	50

### MOST NEGATIVE BASIS

FRESENIUS MED	6.875	Jul 15, 2017	500	114.15	140	189	192	179	50	<b>-129</b>	-138	-155	-0.1	-72%	1.26	50
HCA INC	6.500	Feb 15, 2020	3000	110.40	177	265	275	250	174	<b>-77</b>	-65	-82	0.1	-31%	1.48	153
HEALTH NET INC	6.375	Jun 01, 2017	400	107.94	258	311	314	302	226	<b>-76</b>	-82	-91	0.6	-25%	1.16	284
COVENTRY HEALTH	5.950	Mar 15, 2017	383	114.07	21	82	84	81	32	<b>-49</b>	-40	-43	0.3	-61%	1.26	40

<sup>1</sup> For bonds between 3 yrs and 10.25 yrs to maturity that have Par Equivalent CDS Spread above 10bps.



## Most Positive and Negative Basis Opportunities for High Yield Bonds (Sorted by Basis by Sectors)<sup>1</sup>

	Cpn	Maturity	Outst. \$mm	Close Price	Bond Valuation Measures				Bond-CDS Comparison							CDS Amnt for = Risk	Memo: 5YR CDS Sprd
					Sprd to Bm	Sprd to Swaps (Isprd)	Sprd to Swaps (Zsprd)	Par Equiv. CDS Sprd (A)	CDS Sprd (to Bond Maturity) (B)	BASIS Positive= CDS Cheap (B-A)	1 Mth Avg. Basis	3 Mth Avg. Basis	Z-score vs. 3 Mth	BASIS % of Spread			
HOMEBUILDERS																	
MOST POSITIVE BASIS																	
KB HOME	7.250	Jun 15, 2018	300	109.66	350	360	367	358	301	-57	-54	-44	0.4	-16%	1.19	328	
STANDRD PAC CORP	8.375	May 15, 2018	575	116.49	293	306	313	306	237	-69	-66	-64	0.7	-23%	1.31	265	
PULTE CORP	7.625	Oct 15, 2017	150	115.00	229	249	254	245	152	-93	-74	-56	-1.4	-38%	1.28	193	
K HOVNANIAN ENTR	8.625	Jan 15, 2017	121	109.67	388	455	458	447	333	-115	-144	-131	0.1	-26%	1.15	503	
MOST NEGATIVE BASIS																	
K HOVNANIAN ENTR	8.625	Jan 15, 2017	121	109.67	388	455	458	447	333	-115	-144	-131	0.1	-26%	1.15	503	
PULTE CORP	7.625	Oct 15, 2017	150	115.00	229	249	254	245	152	-93	-74	-56	-1.4	-38%	1.28	193	
STANDRD PAC CORP	8.375	May 15, 2018	575	116.49	293	306	313	306	237	-69	-66	-64	0.7	-23%	1.31	265	
KB HOME	7.250	Jun 15, 2018	300	109.66	350	360	367	358	301	-57	-54	-44	0.4	-16%	1.19	328	

## INDUSTRIALS

### MOST POSITIVE BASIS

OWENS-ILL INC	7.800	May 15, 2018	250	115.07	272	286	292	286	146	<b>-140</b>	-138	-105	-0.1	-49%	1.28	165	
PACTIV LLC	8.125	Jun 15, 2017	300	107.14	451	503	507	490	271	<b>-220</b>	-256	-239	1.7	-45%	1.15	381	

### MOST NEGATIVE BASIS

PACTIV LLC	8.125	Jun 15, 2017	300	107.14	451	503	507	490	271	<b>-220</b>	-256	-239	1.7	-45%	1.15	381	
OWENS-ILL INC	7.800	May 15, 2018	250	115.07	272	286	292	286	146	<b>-140</b>	-138	-105	-0.1	-49%	1.28	165	

<sup>1</sup> For bonds between 3 yrs and 10.25 yrs to maturity that have Par Equivalent CDS Spread above 10bps.

## Most Positive and Negative Basis Opportunities for High Yield Bonds (Sorted by Basis by Sectors)<sup>1</sup>

					Bond Valuation Measures				Bond-CDS Comparison							CDS Amnt for = Risk	Memo: 5YR CDS Sprd
	Cpn	Maturity	Outst. \$mm	Close Price	Sprd to Bm	Sprd to Swaps (Isprd)	Sprd to Swaps (Zsprd)	Par Equiv. CDS Sprd (A)	CDS Sprd (to Bond Maturity) (B)	BASIS Positive= CDS Cheap (B-A)	1 Mth Avg. Basis	3 Mth Avg. Basis	Z-score vs. 3 Mth	BASIS % of Spread			
MEDIA																	
MOST POSITIVE BASIS																	
KNIGHT RIDDER	5.750	Sep 01, 2017	261	103.41	339	383	385	375	554	179	232	211	0.6	48%	1.06	675	
CLEAR CHANNEL	6.875	Jun 15, 2018	175	88.21	881	891	898	858	997	139	131	108	0.5	16%	0.88	1026	
CSC HOLDINGS INC	7.625	Jul 15, 2018	500	115.25	263	270	277	272	283	10	20	23	-0.0	4%	1.29	305	
CLEAR CHANNEL	5.500	Dec 15, 2016	250	89.28	908	898	899	857	860	4	36	-20	0.3	0%	0.89	1026	
CSC HOLDINGS INC	7.875	Feb 15, 2018	300	115.21	257	281	287	282	251	-30	-22	-16	-0.3	-11%	1.29	305	
MOST NEGATIVE BASIS																	
CABLEVISION SYS	7.750	Apr 15, 2018	750	112.46	322	340	346	339	264	-75	-64	-65	-0.8	-22%	1.24	305	
CABLEVISION SYS	8.000	Apr 15, 2020	500	111.65	300	383	397	390	350	-40	-22	-17	-1.0	-10%	1.23	305	
CSC HOLDINGS INC	7.875	Feb 15, 2018	300	115.21	257	281	287	282	251	-30	-22	-16	-0.3	-11%	1.29	305	
CLEAR CHANNEL	5.500	Dec 15, 2016	250	89.28	908	898	899	857	860	4	36	-20	0.3	0%	0.89	1026	
CSC HOLDINGS INC	7.625	Jul 15, 2018	500	115.25	263	270	277	272	283	10	20	23	-0.0	4%	1.29	305	
TECHNOLOGY																	
MOST POSITIVE BASIS																	
MOST NEGATIVE BASIS																	

<sup>1</sup> For bonds between 3 yrs and 10.25 yrs to maturity that have Par Equivalent CDS Spread above 10bps.

## Most Positive and Negative Basis Opportunities for High Yield Bonds (Sorted by Basis by Sectors)<sup>1</sup>

		Bond Valuation Measures							Bond-CDS Comparison							CDS	Memo:
					Sprd	Sprd	Par		CDS	BASIS	1 Mth	3 Mth	Z-score	BASIS	CDS		
		Outst.	Close		Sprd	to	to	Equiv.	Sprd	Positive=	Avg.	Avg.	vs.	% of	Amnt	5YR	
	Cpn	Maturity	\$mm	Price	to	Swaps	Swaps	CDS Sprd	(to Bond Maturity)	CDS Cheap	Basis	Basis	3 Mth	Spread	for =	CDS	
					Bm	(Isprd)	(Zsprd)	(A)	(B)	(B-A)					Risk	Sprd	
TELECOMM																	
MOST POSITIVE BASIS																	
FRONTIER COMM	8.125	Oct 01, 2018	583	115.54	316	313	322	315	310	-5	-6	-4	0.6	-2%	1.29	319	
FRONTIER COMM	7.125	Mar 15, 2019	434	109.11	378	357	366	359	337	-22	-9	-2	-0.2	-6%	1.18	319	
SPRINT CAP CORP	6.900	May 01, 2019	1729	107.83	387	361	370	362	325	-37	-24	-29	-0.4	-10%	1.15	304	
SPRINT NEXTEL	6.000	Dec 01, 2016	2000	108.65	243	234	235	229	178	-50	-45	-54	-0.9	-22%	1.16	304	
SPRINT NEXTEL	8.375	Aug 15, 2017	1300	115.81	242	287	292	283	231	-52	-40	-52	-1.7	-19%	1.29	304	
MOST NEGATIVE BASIS																	
US WEST CAP	6.500	Nov 15, 2018	174	109.41	302	294	301	294	142	-153	-157	-151	0.7	-52%	1.18	142	
CENTURYLINK INC	6.000	Apr 01, 2017	500	109.61	161	220	222	217	140	-77	-67	-82	0.1	-36%	1.19	226	
SPRINT NEXTEL	8.375	Aug 15, 2017	1300	115.81	242	287	292	283	231	-52	-40	-52	-1.7	-19%	1.29	304	
SPRINT NEXTEL	6.000	Dec 01, 2016	2000	108.65	243	234	235	229	178	-50	-45	-54	-0.9	-22%	1.16	304	
SPRINT CAP CORP	6.900	May 01, 2019	1729	107.83	387	361	370	362	325	-37	-24	-29	-0.4	-10%	1.15	304	

## UTILITIES

### MOST POSITIVE BASIS

AES CORP	8.000	Oct 15, 2017	1150	117.66	178	216	221	214	152	-62	-60	-49	-0.6	-29%	1.33	200	
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### MOST NEGATIVE BASIS

AES CORP	8.000	Oct 15, 2017	1150	117.66	178	216	221	214	152	-62	-60	-49	-0.6	-29%	1.33	200	
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<sup>1</sup> For bonds between 3 yrs and 10.25 yrs to maturity that have Par Equivalent CDS Spread above 10bps.

## Top 10 Basis 1D Move

Company	Cpn	Maturity	Price		TSY Sprd		Z-Spread		Equiv. CDS Sprd		Interp CDS Spread		Basis		Basis 1D Change
			Current	1D Ago	Current	1D Ago	Current	1D Ago	Current	1D Ago	Current	1D Ago	Current	1D Ago	
CLEAR CHANNEL	5.500	Dec 15, 2016	89.28	89.51	908	895	899	886	857	846	860	954	4	109	-105
COOPER TIRE&RUBR	8.000	Dec 15, 2019	103.10	103.12	600	600	564	565	554	554	416	479	-138	-75	-63
K HOVNANIAN ENTR	8.625	Jan 15, 2017	109.67	107.33	388	467	458	534	447	520	333	343	-115	-178	63
JC PENNEY CORP	7.650	Aug 15, 2016	90.62	86.68	1122	1307	1123	1309	1106	1312	1236	1385	130	74	57
CLEAR CHANNEL	4.900	May 15, 2015	96.75	96.74	699	697	696	695	668	669	618	672	-50	2	-52
TOYS R US INC	7.375	Oct 15, 2018	80.12	81.00	1163	1134	1169	1138	1186	1153	1160	1178	-26	25	-51
CLEAR CHANNEL	6.875	Jun 15, 2018	88.21	87.25	881	910	898	925	858	885	997	1075	139	190	-51
JC PENNEY CORP	6.875	Oct 15, 2015	94.01	90.69	1017	1224	1009	1216	979	1194	1212	1379	233	184	49
DONNELLEY & SONS	6.125	Jan 15, 2017	107.98	109.23	206	167	275	233	268	228	140	142	-127	-86	-41
ROYAL CARIBBEAN	7.250	Mar 15, 2018	115.97	114.57	189	222	215	246	211	241	152	151	-59	-90	31

## Top 10 Basis 1W Move

Company	Cpn	Maturity	Price		TSY Sprd		Z-Spread		Equiv. CDS Sprd		Interp CDS Spread		Basis		Basis 1W Change
			Current	1W Ago	Current	1W Ago	Current	1W Ago	Current	1W Ago	Current	1W Ago	Current	1W Ago	
HARRAHS OPER CO	6.500	Jun 01, 2016	80.45	81.02	1572	1529	1579	1534	1482	1440	2150	2280	668	840	-172
CENTEX CORP	5.250	Jun 15, 2015	105.00	106.36	171	88	166	82	160	78	16	16	-144	-62	-82
MGIC INVT CORP	5.375	Nov 01, 2015	104.58	102.91	265	352	256	341	246	328	165	172	-81	-156	75
TOYS R US INC	7.375	Oct 15, 2018	80.12	81.01	1163	1129	1169	1131	1186	1150	1160	1193	-26	44	-70
COOPER TIRE&RUBR	8.000	Dec 15, 2019	103.10	102.93	600	600	564	562	554	552	416	480	-138	-72	-66
CLEAR CHANNEL	6.875	Jun 15, 2018	88.21	83.01	881	1039	898	1052	858	1001	997	1074	139	73	65
K HOVNANIAN ENTR	7.500	May 15, 2016	106.38	107.23	418	382	426	388	416	379	273	283	-143	-97	-47
HARRAHS OPER CO	5.625	Jun 01, 2015	94.49	92.37	934	1085	931	1082	888	1028	1693	1793	805	765	40
JC PENNEY CORP	5.750	Feb 15, 2018	83.37	79.00	939	1084	968	1109	1003	1192	1215	1368	212	176	36
UNIV HEALTH SVCS	7.125	Jun 30, 2016	111.92	112.74	182	151	186	154	180	149	53	54	-127	-95	-32

## Top 10 Basis 1M Move

Company	Cpn	Maturity	Price		TSY Sprd		Z-Spread		Equiv. CDS Sprd		Interp CDS Spread		Basis		Basis 1M Change
			Current	1M Ago	Current	1M Ago	Current	1M Ago	Current	1M Ago	Current	1M Ago	Current	1M Ago	
HARRAHS OPER CO	5.625	Jun 01, 2015	94.49	88.75	934	1334	931	1328	888	1259	1693	1723	805	464	341
JC PENNEY CORP	6.875	Oct 15, 2015	94.01	84.87	1017	1580	1009	1567	979	1557	1212	1505	233	-52	286
HARRAHS OPER CO	6.500	Jun 01, 2016	80.45	74.39	1572	1887	1579	1889	1482	1760	2150	2168	668	409	260
JC PENNEY CORP	5.750	Feb 15, 2018	83.37	73.52	939	1282	968	1297	1003	1436	1215	1451	212	15	196
JC PENNEY CORP	7.650	Aug 15, 2016	90.62	82.00	1122	1520	1123	1517	1106	1547	1236	1496	130	-51	181
PHH CORP	9.250	Mar 01, 2016	114.35	118.00	215	134	225	93	218	90	144	160	-73	70	-144
UNIV HEALTH SVCS	7.125	Jun 30, 2016	111.92	115.00	182	82	186	80	180	77	53	70	-127	-8	-119
US STEEL CORP	7.000	Feb 01, 2018	107.62	108.17	360	352	391	369	380	359	327	404	-54	45	-99
TOYS R US INC	7.375	Oct 15, 2018	80.12	80.02	1163	1161	1169	1155	1186	1152	1160	1033	-26	-119	93
CENTEX CORP	5.250	Jun 15, 2015	105.00	106.60	171	88	166	80	160	77	16	17	-144	-60	-85

**5-10 yr benchmarks, sorted from steepest to flattest curves<sup>1</sup>**

10-year benchmark						5-year benchmark						Z-sprd diff		Avg Z-sprd diff			Dur neutral		Page
Cpn	Maturity	Outst. \$mm	Price	T-sprd	Z-sprd	Cpn	Maturity	Outst. \$mm	Price	T-sprd	Z-sprd	bp	per yr	1M	3M	6M	Ratio #	Carry # <sup>2</sup>	ref

**5-10 yr benchmarks, sorted from flattest to steepest curves<sup>1</sup>**

10-year benchmark						5-year benchmark						Z-sprd diff		Avg Z-sprd diff			Dur neutral		Page
Cpn	Maturity	Outst. \$mm	Price	T-sprd	Z-sprd	Cpn	Maturity	Outst. \$mm	Price	T-sprd	Z-sprd	bp	per yr	1M	3M	6M	Ratio #	Carry # <sup>2</sup>	ref

<sup>1</sup> Benchmarks for 5Y and 10Y are +/- 1Y and 2Y respectively. If the number of 5-10 yr benchmark curves are fewer than 18, the list in two tables above are exactly the same, but in opposite order.

<sup>2</sup> Steepest Benchmark: carry = Z-sprd(10Y) - (Ratio \* Z-sprd(5Y)), Flattest Benchmark: carry = (Ratio \* Z-sprd(5Y)) - Z-sprd(10Y).

**Steepest bond curves vs. 5-yr CDS (based on absolute spread differences)**

Cpn	Maturity	Outst.		T-sprd	Z-sprd	5-yr CDS	Difference		Avg difference			Dur neutral		Page
		\$mm	Price				bp	per yr	1M	3M	6M	Ratio #	Carry # <sup>1</sup>	

**Flattest bond curves vs. 5-yr CDS (based on absolute spread differences)**

Cpn	Maturity	Outst.		T-sprd	Z-sprd	5-yr CDS	Difference		Avg difference			Dur neutral		Page
		\$mm	Price				bp	per yr	1M	3M	6M	Ratio #	Carry # <sup>1</sup>	

<sup>1</sup> Steepest: carry = Z-sprd - (Ratio \* 5-yr CDS), Flattest: carry = (Ratio \* 5-yr CDS) - Z-sprd.

**Steepest bond curves vs. 5-yr CDS (based on spread difference per year)**

Cpn	Maturity	Outst.		T-sprd	Z-sprd	5-yr CDS	Difference		Avg difference			Dur neutral		Page
		\$mm	Price				bp	per yr	1M	3M	6M	Ratio #	Carry # <sup>1</sup>	

**Flattest bond curves vs. 5-yr CDS (based on spread difference per year)**

Cpn	Maturity	Outst.		T-sprd	Z-sprd	5-yr CDS	Difference		Avg difference			Dur neutral		Page
		\$mm	Price				bp	per yr	1M	3M	6M	Ratio #	Carry # <sup>1</sup>	

<sup>1</sup> Steepest: carry = Z-sprd - (Ratio \* 5-yr CDS), Flattest: carry = (Ratio \* 5-yr CDS) - Z-sprd.

**Steepest bond curves vs. 7-yr CDS (based on absolute spread differences)**

Cpn	Maturity	Outst.		T-sprd	Z-sprd	7-yr CDS	Difference		Avg difference			Dur neutral		Page
		\$mm	Price				bp	per yr	1M	3M	6M	Ratio #	Carry # <sup>1</sup>	

**Flattest bond curves vs. 7-yr CDS (based on absolute spread differences)**

Cpn	Maturity	Outst.		T-sprd	Z-sprd	7-yr CDS	Difference		Avg difference			Dur neutral		Page
		\$mm	Price				bp	per yr	1M	3M	6M	Ratio #	Carry # <sup>1</sup>	

<sup>1</sup> Steepest: carry = Z-sprd - (Ratio \* 7-yr CDS), Flattest: carry = (Ratio \* 7-yr CDS) - Z-sprd.



**Steepest bond curves vs. 7-yr CDS (based on spread difference per year)**

Cpn	Maturity	Outst.		T-sprd	Z-sprd	7-yr CDS	Difference		Avg difference			Dur neutral		Page
		\$mm	Price				bp	per yr	1M	3M	6M	Ratio #	Carry # <sup>1</sup>	

**Flattest bond curves vs. 7-yr CDS (based on spread difference per year)**

Cpn	Maturity	Outst.		T-sprd	Z-sprd	7-yr CDS	Difference		Avg difference			Dur neutral		Page
		\$mm	Price				bp	per yr	1M	3M	6M	Ratio #	Carry # <sup>1</sup>	

<sup>1</sup> Steepest: carry = Z-sprd - (Ratio \* 7-yr CDS), Flattest: carry = (Ratio \* 7-yr CDS) - Z-sprd.

**Steepest CDS curves (5-yr-3-yr)**

	3-yr CDS	5-yr CDS	Diff	Avg difference			Dur neutral		2-yr fwd sprd	Page ref
				1W	1M	3M	Ratio #	Carry # <sup>1</sup>		
CAESARS ENTERTAINMENT OPERATI..	2297	2596	299	277	316	398	0.81	-240	3867	22
MERITOR INC	217	452	235	240	223	222	0.66	123	900	21
MCCLATCHY COMPANY NR	454	675	221	217	217	231	0.67	-3	1126	21
US STEEL GROUP INC NR	223	426	203	212	221	249	0.65	83	811	21
HOVNANIAN ENTS INC NR	313	503	190	190	190	207	0.65	21	855	22
BEAZER HOMES USA INC NR	236	415	179	191	194	205	0.65	52	751	21
CLEAR CHANNEL COMUNS INC	852	1026	174	159	149	135	0.69	-209	1404	21
PACTIV LLC NR	216	381	165	165	165	162	0.65	49	690	24
FRONTIER COMMUNICATIONS CORP ..	156	319	163	171	169	179	0.64	75	614	21
CSC HOLDINGS, LLC NR	142	305	163	163	163	162	0.64	83	600	21
GOODYEAR TIRE & RUBBER CO..	123	285	162	169	164	162	0.64	93	573	22
MGM RESORTS INTERNATIONAL NR	137	296	159	159	160	170	0.64	82	581	22
COOPER TIRE & RUBBER CO N..	217	372	155	174	178	195	0.65	38	662	21
DONNELLEY RR & SONS CO	125	280	155	156	155	176	0.64	85	556	23
KB HOME NR	183	328	145	149	149	152	0.65	46	592	22
TOYS R US INC NR	1020	1164	144	127	154	216	0.73	-233	1558	22
DEAN FOODS CO NR	132	270	138	141	141	146	0.64	64	515	23
MGIC INVEST CORP NR	226	360	134	129	129	132	0.65	12	611	23

**Flattest CDS curves (5-yr-3-yr)**

	3-yr CDS	5-yr CDS	Diff	Avg difference			Dur neutral		2-yr fwd sprd	Page ref
				1W	1M	3M	Ratio #	Carry # <sup>1</sup>		
JC PENNEY CO INC NR	1238	1206	-32	-67	-100	-23	0.73	490	1120	22
DUMMY - USD 40	50	50	0	0	0	0	0.62	31	50	23
COVENTRY HEALTH CARE INC	30	40	10	10	13	14	0.61	9	56	22
CENTEX CORP	27	48	21	21	21	23	0.61	-4	82	21
SUNOCO INC	40	66	26	26	26	28	0.62	-1	108	23
HCA HEALTHCARE CO - LOAN ONLY..	116	153	37	38	38	38	0.66	23	224	23
HANSON BUILDING MATERIALS LIM..	90	130	40	40	40	40	0.62	15	196	24
TYSON FOODS INC NR	47	89	42	43	44	45	0.62	-13	157	23
FAIRFAX FINL HLDGS LTD NR	114	164	50	50	50	50	0.63	17	248	23
RECKSON OPERATING PTNRSHIP NR	84	139	55	55	55	61	0.62	-4	231	23
UNIVERSAL HEALTH SVCS INC NR	59	118	59	60	63	73	0.62	-23	215	23
SERVICE CORP INTL NR	97	158	61	61	61	61	0.63	-4	260	23
QWEST CAP FUNDING INC NR	81	142	61	61	61	61	0.62	-11	244	21
TRW AUTO INC NR	66	127	61	64	65	70	0.62	-21	228	22
ALLY FINANCIAL INC	118	181	63	61	61	57	0.63	6	290	23
CONSTELLATION BRANDS INC NR	61	125	64	63	63	58	0.62	-27	231	22
THE ROYAL BANK OF SCOTLAND PU..	149	214	65	66	72	74	0.63	23	323	24
CHESAPEAKE EN CORP NR	134	202	68	69	67	80	0.63	11	319	23

<sup>1</sup> Steepest: Duration neutral carry = 5-yr CDS - (1/ratio) \* 3-yr CDS. Flattest: Duration neutral carry = (1/ratio) \* 3-yr CDS - 5-yr CDS.

**Steepest CDS curves (7-yr-5-yr)**

	5-yr CDS	7-yr CDS	Diff	Avg difference			Dur neutral		2-yr fwd sprd	Page ref
				1W	1M	3M	Ratio #	Carry # <sup>1</sup>		
MCCLATCHY COMPANY NR	675	805	130	122	131	115	0.82	-18	1404	21
MERITOR INC	452	567	115	118	112	101	0.81	9	1058	21
GOODYEAR TIRE & RUBBER CO..	285	380	95	99	97	89	0.79	19	735	22
STANDARD PAC CORP NR	265	356	91	91	92	85	0.78	16	686	22
HOVNANIAN ENTS INC NR	503	591	88	88	90	68	0.79	-46	925	22
US STEEL GROUP INC NR	426	514	88	85	84	81	0.81	-12	888	21
FRONTIER COMMUNICATIONS CORP ..	319	405	86	91	91	95	0.79	1	733	21
CENTURYLINK, INC	226	311	85	84	85	85	0.78	21	608	21
SLM CORP NR	279	364	85	86	86	78	0.79	11	677	24
DONNELLEY RR & SONS CO	280	365	85	85	88	102	0.79	11	679	23
BEAZER HOMES USA INC NR	415	499	84	90	92	90	0.80	-20	833	21
KB HOME NR	328	411	83	85	87	83	0.79	-4	727	22
OWENS ILLINOIS INC NR	165	244	79	80	79	59	0.77	30	505	24
ISTAR FINANCIAL INC NR	313	391	78	77	79	73	0.81	5	717	23
CLEAR CHANNEL COMUNS INC	1026	1102	76	71	67	58	0.83	-134	1460	21
HCA HEALTHCARE CO NR	247	322	75	73	72	69	0.78	5	582	22
SMITHFIELD FOODS INC NR	255	327	72	74	75	74	0.78	0	584	23
LENNAR CORP	240	311	71	72	71	77	0.78	3	558	22

**Flattest CDS curves (7-yr-5-yr)**

	5-yr CDS	7-yr CDS	Diff	Avg difference			Dur neutral		2-yr fwd sprd	Page ref
				1W	1M	3M	Ratio #	Carry # <sup>1</sup>		
DEAN FOODS CO NR	270	250	-20	59	75	70	0.77	101	182	23
JC PENNEY CO INC NR	1206	1193	-13	-15	-22	-1	0.85	226	1118	22
DUMMY - USD 40	50	50	0	0	0	0	0.74	18	50	23
CAESARS ENTERTAINMENT OPERATI..	2596	2602	6	5	29	54	0.93	189	2683	22
COVENTRY HEALTH CARE INC	40	47	7	7	10	9	0.74	7	67	22
FAIRFAX FINL HLDGS LTD NR	164	174	10	11	11	11	0.76	42	205	23
CENTEX CORP	48	60	12	13	14	15	0.74	5	94	21
HEALTH NET INC	284	301	17	17	18	19	0.77	68	359	23
TOYS R US INC NR	1164	1183	19	19	14	30	0.86	170	1303	22
FIRST INDUSTRIAL LP NR	241	262	21	22	23	23	0.77	51	332	23
HBOS PLC	291	316	25	25	26	28	0.76	67	397	23
THE ROYAL BANK OF SCOTLAND PU..	214	241	27	28	31	35	0.76	41	325	24
EL PASO CORP NR	190	219	29	29	30	30	0.76	31	313	23
HCA HEALTHCARE CO - LOAN ONLY..	153	182	29	29	29	29	0.81	7	302	23
COMMERCIAL METALS CO	259	289	30	30	30	28	0.77	47	392	21
RECKSON OPERATING PTNRSHIP NR	139	170	31	31	31	29	0.76	13	266	23
HANSON BUILDING MATERIALS LIM..	130	161	31	31	31	31	0.76	10	257	24
SUNOCO INC	66	98	32	32	32	32	0.75	-10	192	23

<sup>1</sup> Steepest: Duration neutral carry = 7-yr CDS - (1/ratio) \* 5-yr CDS. Flattest: Duration neutral carry = (1/ratio) \* 5-yr CDS - 7-yr CDS.

**Steepest CDS curves (10-yr-5-yr)**

	5-yr CDS	10-yr CDS	Diff	Avg difference			Dur neutral		5-yr fwd sprd	Page ref
				1W	1M	3M	Ratio #	Carry # <sup>1</sup>		
MERITOR INC	452	602	150	155	147	134	0.69	-53	931	21
US STEEL GROUP INC NR	426	551	125	120	118	105	0.68	-75	822	21
GOODYEAR TIRE & RUBBER CO..	285	404	119	124	123	114	0.65	-34	622	22
ISTAR FINANCIAL INC NR	313	431	118	117	120	111	0.69	-23	688	23
CENTURYLINK, INC	226	342	116	116	117	117	0.63	-17	537	21
STANDARD PAC CORP NR	265	379	114	115	116	108	0.64	-35	580	22
MCCLATCHY COMPANY NR	675	788	113	104	116	99	0.70	-176	1054	21
HOVNANIAN ENTS INC NR	503	615	112	111	115	88	0.65	-159	822	22
SLM CORP NR	279	389	110	110	112	100	0.64	-47	587	24
FRONTIER COMMUNICATIONS CORP ..	319	424	105	111	113	117	0.65	-67	620	21
BEAZER HOMES USA INC NR	415	518	103	110	113	115	0.66	-111	721	21
KB HOME NR	328	431	103	106	109	112	0.65	-74	623	22
HCA HEALTHCARE CO NR	247	347	100	96	96	100	0.62	-51	511	22
SEAGATE TECHNOLOGY HDD HOLDIN..	153	253	100	101	82	48	0.60	-2	405	24
LENNAR CORP	240	338	98	100	99	107	0.62	-49	501	22
DEAN FOODS CO NR	270	367	97	94	94	89	0.62	-68	525	23
SPRINGLEAF FINANCE CORPORATIO..	349	446	97	96	104	89	0.67	-75	643	23
OWENS ILLINOIS INC NR	165	261	96	96	98	74	0.61	-9	410	24

**Flattest CDS curves (10-yr-5-yr)**

	5-yr CDS	10-yr CDS	Diff	Avg difference			Dur neutral		5-yr fwd sprd	Page ref
				1W	1M	3M	Ratio #	Carry # <sup>1</sup>		
CAESARS ENTERTAINMENT OPERATI..	2596	2532	-64	-69	-17	15	0.89	385	2045	22
JC PENNEY CO INC NR	1206	1155	-51	-56	-48	-16	0.75	453	1001	22
TOYS R US INC NR	1164	1156	-8	-8	8	33	0.77	356	1129	22
DUMMY - USD 40	50	50	0	0	0	0	0.55	41	50	23
COVENTRY HEALTH CARE INC	40	54	14	14	19	19	0.55	19	71	22
CENTEX CORP	48	66	18	20	21	22	0.56	20	89	21
FAIRFAX FINL HLDGS LTD NR	164	184	20	21	21	21	0.58	99	212	23
HEALTH NET INC	284	312	28	28	30	31	0.61	154	356	23
CLEAR CHANNEL COMUNS INC	1026	1060	34	24	17	-4	0.70	406	1141	21
THE ROYAL BANK OF SCOTLAND PU..	214	253	39	39	44	50	0.58	116	308	24
FIRST INDUSTRIAL LP NR	241	281	40	40	41	41	0.61	114	343	23
HBOS PLC	291	332	41	42	43	47	0.60	153	393	23
RECKSON OPERATING PTNRSHIP NR	139	182	43	42	43	42	0.58	58	242	23
UNIVERSAL HEALTH SVCS INC NR	118	161	43	53	65	58	0.58	42	220	23
ALLY FINANCIAL INC	181	228	47	48	51	55	0.61	69	301	23
HCA HEALTHCARE CO - LOAN ONLY..	153	200	47	47	48	48	0.68	25	301	23
EL PASO CORP NR	190	239	49	49	50	50	0.60	78	312	23
COMMERCIAL METALS CO	259	309	50	50	51	49	0.62	109	389	21

<sup>1</sup> Steepest: Duration neutral carry = 10-yr CDS - (1/ratio) \* 5-yr CDS. Flattest: Duration neutral carry = (1/ratio) \* 5-yr CDS - 10-yr CDS.

## US Corporate High Yield: Basis Report

	Bond Valuation Measures								Bond-CDS Comparison							CDS Amnt for =	Memo: 5YR CDS Sprd
	Cpn	Maturity	Outst. \$mm	Close Price	Sprd to Bm	Sprd to Swaps (Isprd)	Sprd to Swaps (Zsprd)	Par Equiv. CDS Sprd (A)	CDS Sprd (to Bond Maturity) (B)	BASIS Positive= CDS Cheap (B-A)	1 Mth Avg. Basis	3 Mth Avg. Basis	Z-score vs. 3 Mth	BASIS % of Spread			
BASIC MATERIALS																	
ALCOA INC	5.720	Feb 23, 2019	750	107.05	285	266	273	268	237	-31	-36	-17	-0.3	-12%	1.14	226	
COMMERCIAL METAL	6.500	Jul 15, 2017	400	111.58	175	224	227	220	180	-40	-57	-65	1.3	-18%	1.22	259	
US STEEL CORP	6.050	Jun 01, 2017	450	107.17	249	302	305	297	266	-31	16	49	-1.8	-10%	1.14	426	
US STEEL CORP	7.000	Feb 01, 2018	500	107.62	360	386	391	380	327	-54	5	64	-2.1	-14%	1.16	426	
COMMUNICATIONS																	
CABLEVISION SYS	7.750	Apr 15, 2018	750	112.46	322	340	346	339	264	-75	-64	-65	-0.8	-22%	1.24	305	
CABLEVISION SYS	8.000	Apr 15, 2020	500	111.65	300	383	397	390	350	-40	-22	-17	-1.0	-10%	1.23	305	
CENTURYLINK INC	6.000	Apr 01, 2017	500	109.61	161	220	222	217	140	-77	-67	-82	0.1	-36%	1.19	226	
CLEAR CHANNEL	4.900	May 15, 2015	250	96.75	699	696	696	668	618	-50	-24	24	-1.2	-7%	0.98	1026	
CLEAR CHANNEL	5.500	Dec 15, 2016	250	89.28	908	898	899	857	860	4	36	-20	0.3	0%	0.89	1026	
CLEAR CHANNEL	6.875	Jun 15, 2018	175	88.21	881	891	898	858	997	139	131	108	0.5	16%	0.88	1026	
CSC HOLDINGS INC	7.875	Feb 15, 2018	300	115.21	257	281	287	282	251	-30	-22	-16	-0.3	-11%	1.29	305	
CSC HOLDINGS INC	7.625	Jul 15, 2018	500	115.25	263	270	277	272	283	10	20	23	-0.0	4%	1.29	305	
ECHOSTAR DBS	7.125	Feb 01, 2016	1500	110.78	150	163	164	158	101	-56	-57	-68	-0.4	-36%	1.21	235	
EMBARQ CORP	7.082	Jun 01, 2016	1184	112.15	157	161	162	158	101	-57	-53	-44	-1.3	-36%	1.23	206	
FRONTIER COMM	8.125	Oct 01, 2018	583	115.54	316	313	322	315	310	-5	-6	-4	0.6	-2%	1.29	319	
FRONTIER COMM	7.125	Mar 15, 2019	434	109.11	378	357	366	359	337	-22	-9	-2	-0.2	-6%	1.18	319	
GANNETT CO	6.375	Sep 01, 2015	250	101.74	508	499	499	480	43	-437	-434	-430	0.5	-91%	1.06	187	
GANNETT CO	10.000	Apr 01, 2016	193	116.97	207	207	208	201	63	-137	-135	-132	1.2	-68%	1.32	187	
KNIGHT RIDDER	5.750	Sep 01, 2017	261	103.41	339	383	385	375	554	179	232	211	0.6	48%	1.06	675	
SPRINT CAP CORP	6.900	May 01, 2019	1729	107.83	387	361	370	362	325	-37	-24	-29	-0.4	-10%	1.15	304	
SPRINT NEXTEL	6.000	Dec 01, 2016	2000	108.65	243	234	235	229	178	-50	-45	-54	-0.9	-22%	1.16	304	
SPRINT NEXTEL	8.375	Aug 15, 2017	1300	115.81	242	287	292	283	231	-52	-40	-52	-1.7	-19%	1.29	304	
TELECOM IT CAP	5.250	Oct 01, 2015	765	105.21	208	200	200	194	123	-71	-75	-64	0.8	-37%	1.11	275	
US WEST CAP	6.500	Nov 15, 2018	174	109.41	302	294	301	294	142	-153	-157	-151	0.7	-52%	1.18	142	
CONSUMER, CYCLICAL																	
ARVINMERITOR	8.125	Sep 15, 2015	84	109.07	267	258	259	250	102	-148	-136	-127	-0.5	-59%	1.17	452	
BEAZER HOMES USA	8.125	Jun 15, 2016	173	110.64	317	322	323	314	203	-111	-97	-75	-1.3	-35%	1.19	415	
CENTEX CORP	5.250	Jun 15, 2015	274	105.00	171	166	166	160	16	-144	-76	-85	-1.9	-90%	1.11	48	
CENTEX CORP	6.500	May 01, 2016	465	111.50	113	119	119	115	23	-92	-67	-87	-0.5	-80%	1.22	48	
COOPER TIRE&RUBR	8.000	Dec 15, 2019	174	103.10	600	550	564	554	416	-138	-73	-11	-1.4	-25%	1.09	372	
D.R. HORTON	5.625	Jan 15, 2016	170	107.69	141	153	153	148	81	-67	-69	-102	1.0	-45%	1.15	197	
D.R. HORTON	6.500	Apr 15, 2016	373	110.74	133	142	143	138	94	-44	-48	-62	-0.1	-32%	1.21	197	
DILLARDS INC	6.625	Jan 15, 2018	87	111.74	222	247	251	245	116	-130	-122	-111	-0.3	-53%	1.22	153	

## US Corporate High Yield: Basis Report

	Bond Valuation Measures								Bond-CDS Comparison							CDS Amnt for = Risk	Memo: 5YR CDS Sprd
	Cpn	Maturity	Outst. \$mm	Close Price	Sprd to Bm	Sprd to Swaps (Isprd)	Sprd to Swaps (Zsprd)	Par Equiv. CDS Sprd (A)	CDS Sprd (to Bond Maturity) (B)	BASIS Positive= CDS Cheap (B-A)	1 Mth Avg. Basis	3 Mth Avg. Basis	Z-score vs. 3 Mth	BASIS % of Spread			
DILLARDS INC	7.130	Aug 01, 2018	162	114.65	234	238	245	240	142	-99	-107	-87	-0.6	-41%	1.27	153	
GOODYEAR TIRE	8.750	Aug 15, 2020	282	116.64	294	366	382	375	371	-4	6	10	0.6	-1%	1.31	285	
HARRAHS OPER CO	5.625	Jun 01, 2015	459	94.49	934	931	931	888	1693	805	665	354	1.4	91%	0.95	2596	
HARRAHS OPER CO	6.500	Jun 01, 2016	365	80.45	1572	1578	1579	1482	2150	668	600	206	0.8	45%	0.77	2596	
JC PENNEY CORP	6.875	Oct 15, 2015	200	94.01	1017	1008	1009	979	1212	233	182	55	1.2	24%	0.93	1206	
JC PENNEY CORP	7.650	Aug 15, 2016	200	90.62	1122	1122	1123	1106	1236	130	10	-70	1.8	12%	0.88	1206	
JC PENNEY CORP	7.950	Apr 01, 2017	285	87.85	1113	1173	1176	1178	1230	52	12	-71	1.2	4%	0.83	1206	
JC PENNEY CORP	5.750	Feb 15, 2018	300	83.37	939	963	968	1003	1215	212	122	21	1.5	21%	0.75	1206	
K HOVNANIAN ENTR	6.250	Jan 15, 2016	173	104.46	352	364	364	355	236	-118	-107	-124	-1.4	-33%	1.08	503	
K HOVNANIAN ENTR	7.500	May 15, 2016	87	106.38	418	425	426	416	273	-143	-121	-103	-1.5	-34%	1.10	503	
K HOVNANIAN ENTR	8.625	Jan 15, 2017	121	109.67	388	455	458	447	333	-115	-144	-131	0.1	-26%	1.15	503	
KB HOME	6.250	Jun 15, 2015	200	106.97	142	138	138	134	98	-36	-39	-71	0.7	-27%	1.14	328	
KB HOME	7.250	Jun 15, 2018	300	109.66	350	360	367	358	301	-57	-54	-44	0.4	-16%	1.19	328	
LENNAR CORP	5.600	May 31, 2015	499	105.87	138	135	135	131	70	-62	-64	-60	-0.8	-47%	1.12	240	
LENNAR CORP	6.500	Apr 15, 2016	240	109.35	191	198	198	193	114	-80	-87	-80	-0.2	-41%	1.18	240	
LIMITED BRANDS	6.900	Jul 15, 2017	700	115.52	106	155	158	154	112	-43	-55	-63	1.1	-28%	1.29	168	
LIMITED BRANDS	8.500	Jun 15, 2019	500	120.34	298	267	279	273	186	-88	-80	-68	-1.3	-32%	1.37	168	
LIMITED BRANDS	7.000	May 01, 2020	400	112.68	190	271	283	279	206	-73	-61	-54	-0.0	-26%	1.24	168	
MDC HOLDINGS INC	5.375	Jul 01, 2015	250	105.41	165	161	161	155	57	-98	-91	-108	-0.7	-63%	1.11	170	
MGM MIRAGE	6.625	Jul 15, 2015	875	108.01	138	133	133	129	72	-57	-77	-75	0.3	-44%	1.16	296	
MGM MIRAGE	6.875	Apr 01, 2016	238	110.00	217	202	202	196	106	-90	-96	-100	0.3	-46%	1.20	296	
MGM MIRAGE	7.500	Jun 01, 2016	733	112.59	177	183	184	179	116	-63	-85	-78	0.4	-35%	1.24	296	
MGM MIRAGE	7.625	Jan 15, 2017	743	114.28	148	215	217	212	156	-55	-78	-74	2.4	-26%	1.27	296	
MGM MIRAGE	11.375	Mar 01, 2018	475	127.55	289	311	320	315	257	-58	-57	-32	0.4	-18%	1.51	296	
MGM RESORTS	10.000	Nov 01, 2016	500	117.50	336	304	306	296	135	-162	-174	-137	0.1	-55%	1.33	296	
PULTE CORP	7.625	Oct 15, 2017	150	115.00	229	249	254	245	152	-93	-74	-56	-1.4	-38%	1.28	193	
ROYAL CARIBBEAN	11.875	Jul 15, 2015	300	116.40	141	136	136	130	46	-84	-77	-91	-0.7	-64%	1.32	181	
ROYAL CARIBBEAN	7.250	Jun 15, 2016	350	112.10	179	184	185	179	77	-103	-84	-78	-1.3	-57%	1.23	181	
ROYAL CARIBBEAN	7.250	Mar 15, 2018	150	115.97	189	209	215	211	152	-59	-70	-50	-0.0	-28%	1.30	181	
STANDRD PAC CORP	10.750	Sep 15, 2016	279	122.03	201	199	201	194	138	-56	-76	-90	1.8	-29%	1.41	265	
STANDRD PAC CORP	8.375	May 15, 2018	575	116.49	293	306	313	306	237	-69	-66	-64	0.7	-23%	1.31	265	
TOLL BR FIN CORP	5.150	May 15, 2015	300	104.74	160	157	157	152	42	-111	-151	-126	0.5	-73%	1.10	178	
TOYS R US INC	7.375	Oct 15, 2018	400	80.12	1163	1159	1169	1186	1160	-26	-41	-48	0.9	-2%	0.70	1164	
TRW AUTOMOTIVE	7.250	Mar 15, 2017	441	115.12	110	171	174	169	77	-92	-82	-92	0.4	-54%	1.28	127	

### CONSUMER, NON-CYCLICAL

COLUMBIA/HCA	7.190	Nov 15, 2015	150	109.47	198	188	188	182	82	-100	-93	-90	-0.7	-55%	1.17	247	
CONSTELLATION BR	7.250	Sep 01, 2016	700	113.85	152	151	153	147	58	-89	-65	-67	-2.6	-61%	1.26	125	
CONSTELLATION BR	7.250	May 15, 2017	700	116.15	102	157	160	156	79	-77	-58	-71	-2.6	-49%	1.30	125	
COVENTRY HEALTH	5.950	Mar 15, 2017	383	114.07	21	82	84	81	32	-49	-40	-43	0.3	-61%	1.26	40	

## US Corporate High Yield: Basis Report

					Bond Valuation Measures				Bond-CDS Comparison								CDS Amnt for = Risk	Memo: 5YR CDS Sprd
	Cpn	Maturity	Outst. \$mm	Close Price	Sprd to Bm	Sprd to Swaps (Isprd)	Sprd to Swaps (Zsprd)	Par Equiv. CDS Sprd (A)	CDS Sprd (to Bond Maturity) (B)	BASIS Positive= CDS Cheap (B-A)	1 Mth Avg. Basis	3 Mth Avg. Basis	Z-score vs. 3 Mth	BASIS % of Spread				
DEAN FOODS CO	7.000	Jun 01, 2016	500	112.36	139	145	146	142	111	-32	-53	-78	1.4	-22%	1.24	270		
DEAN FOODS CO	6.900	Oct 15, 2017	142	109.59	284	322	326	318	198	-121	-144	-141	2.0	-38%	1.19	270		
DONNELLEY & SONS	6.125	Jan 15, 2017	251	107.98	206	273	275	268	140	-127	-77	-44	-1.6	-48%	1.16	280		
FRESENIUS MED	6.875	Jul 15, 2017	500	114.15	140	189	192	179	50	-129	-138	-155	-0.1	-72%	1.26	50		
HCA INC	6.500	Feb 15, 2016	1000	109.59	151	163	164	159	98	-61	-58	-60	-0.8	-39%	1.17	247		
HCA INC	6.500	Feb 15, 2020	3000	110.40	177	265	275	250	174	-77	-65	-82	0.1	-31%	1.48	153		
HEALTH NET INC	6.375	Jun 01, 2017	400	107.94	258	311	314	302	226	-76	-82	-91	0.6	-25%	1.16	284		
PHH CORP	9.250	Mar 01, 2016	170	114.35	215	224	225	218	144	-73	5	58	-1.9	-34%	1.28	299		
SERVICE CORP INT	7.625	Oct 01, 2018	250	115.45	272	269	277	269	154	-114	-121	-104	-0.2	-43%	1.29	158		
SMITHFIELD FOODS	7.750	Jul 01, 2017	497	116.99	140	190	194	190	169	-21	-10	-25	-0.9	-11%	1.32	255		
SUPervalU INC	8.000	May 01, 2016	628	111.35	257	265	266	258	194	-64	-65	-101	0.7	-25%	1.22	414		
TYSON FOODS INC	7.000	May 01, 2018	120	118.22	126	141	147	144	77	-67	-58	-60	-1.0	-47%	1.33	89		
UNIV HEALTH SVCS	7.125	Jun 30, 2016	400	111.92	182	185	186	180	53	-127	-97	-80	-1.2	-70%	1.23	118		

### ENERGY

CHESAPEAKE ENRGY	6.500	Aug 15, 2017	660	111.25	190	236	239	229	157	-72	-46	-26	-1.5	-31%	1.21	202	
CHESAPEAKE ENRGY	7.250	Dec 15, 2018	669	114.89	261	250	258	249	205	-44	-40	-7	0.0	-18%	1.28	202	
CHESAPEAKE ENRGY	6.875	Nov 15, 2020	499	111.97	204	268	281	274	254	-20	-22	2	1.2	-7%	1.23	202	
EL PASO CORP	7.000	Jun 15, 2017	786	113.77	154	206	209	201	138	-63	-77	-94	0.9	-31%	1.26	190	
EL PASO CORP	7.250	Jun 01, 2018	477	113.39	262	274	280	272	174	-98	-98	-94	-0.2	-36%	1.25	190	
EL PASO CORP	6.500	Sep 15, 2020	349	107.71	235	304	316	310	217	-93	-104	-109	1.1	-30%	1.16	190	
PEABODY ENERGY	7.375	Nov 01, 2016	650	113.07	216	210	211	203	213	10	26	53	-1.4	5%	1.25	343	
SONAT INC	7.000	Feb 01, 2018	82	109.15	321	347	352	340	160	-180	-197	-204	2.1	-53%	1.18	190	
SUNOCO INC	5.750	Jan 15, 2017	400	110.17	101	168	170	165	43	-122	-98	-115	-0.7	-74%	1.19	66	

### FINANCIAL

ALLY FINANCIAL	6.250	Dec 01, 2017	1000	111.97	170	203	207	198	151	-47	-50	-59	0.8	-24%	1.34	181	
AMER GENL FIN	5.400	Dec 01, 2015	750	104.52	280	269	269	259	169	-90	-75	-93	-1.4	-35%	1.14	349	
AMER GENL FIN	5.750	Sep 15, 2016	375	105.60	308	306	307	295	216	-79	-94	-88	-0.0	-27%	1.17	349	
ENTERTAINMENT PR	7.750	Jul 15, 2020	250	115.09	228	300	314	294	50	-244	-239	-252	0.6	-83%	1.28	50	
FAIRFAX FINL HLD	8.250	Oct 01, 2015	82	111.75	151	141	142	133	89	-44	-51	-45	0.0	-33%	1.23	164	
FAIRFAX FINL HLD	7.375	Apr 15, 2018	144	114.68	239	253	259	249	150	-99	-92	-88	-0.4	-40%	1.28	164	
FIRST IND LP	5.750	Jan 15, 2016	160	106.51	205	219	220	211	129	-82	-85	-88	1.8	-39%	1.13	241	
FIRST IND LP	5.950	May 15, 2017	102	106.90	245	300	303	293	186	-107	-98	-99	1.5	-37%	1.14	241	
HBOS PLC	6.750	May 21, 2018	2000	112.38	237	250	256	250	274	24	25	-56	-0.2	10%	1.18	291	
ISTAR FINANCIAL	5.875	Mar 15, 2016	261	107.03	218	226	227	217	148	-69	-85	-83	0.0	-32%	1.21	313	
ISTAR FINANCIAL	5.850	Mar 15, 2017	100	105.70	263	324	327	314	211	-104	-102	-104	0.5	-33%	1.17	313	
MGIC INVT CORP	5.375	Nov 01, 2015	83	104.58	265	256	256	246	165	-81	-139	-277	0.5	-33%	1.10	360	
RECKSON OPER	6.000	Mar 31, 2016	255	108.68	163	173	173	169	66	-103	-99	-89	1.0	-61%	1.16	139	

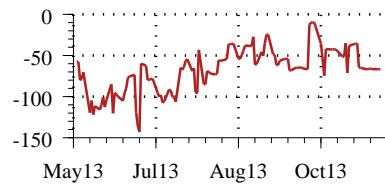
## US Corporate High Yield: Basis Report

					Bond Valuation Measures				Bond-CDS Comparison							CDS Amnt for =	Memo: 5YR CDS
					Sprd to Bm	Sprd to Swaps (Isprd)	Sprd to Swaps (Zsprd)	Par Equiv. CDS Sprd (A)	CDS Sprd (to Bond Maturity) (B)	BASIS Positive= CDS Cheap (B-A)	1 Mth Avg. Basis	3 Mth Avg. Basis	Z-score vs. 3 Mth	BASIS % of Spread			
Cpn	Maturity	Outst. \$mm	Close Price														
ROYAL BK SCOTLND	4.700	Jul 03, 2018	350	102.45	275	283	287	280	205	-76	-47	-32	-0.6	-27%	1.05	214	
SLM CORP	8.450	Jun 15, 2018	2500	116.05	315	325	333	321	260	-61	-50	-41	-1.0	-19%	1.33	279	
INDUSTRIAL																	
HANSON LTD	6.125	Aug 15, 2016	750	109.32	203	201	202	196	85	-112	-97	-102	-1.7	-57%	1.18	130	
LAFARGE SA	6.500	Jul 15, 2016	800	109.94	203	206	207	200	102	-98	-80	-69	-1.8	-49%	1.19	204	
MASCO CORP	4.800	Jun 15, 2015	500	104.38	166	162	162	156	47	-110	-106	-95	-1.1	-70%	1.09	167	
MASCO CORP	6.125	Oct 03, 2016	1000	111.69	135	131	133	128	87	-42	-48	-46	0.2	-33%	1.22	167	
OWENS-ILL INC	7.800	May 15, 2018	250	115.07	272	286	292	286	146	-140	-138	-105	-0.1	-49%	1.28	165	
PACTIV LLC	8.125	Jun 15, 2017	300	107.14	451	503	507	490	271	-220	-256	-239	1.7	-45%	1.15	381	
TECHNOLOGY																	
SEAGATE TECH HDD	6.800	Oct 01, 2016	335	113.14	148	144	146	142	72	-70	-57	-70	-0.6	-49%	1.25	153	
UTILITIES																	
AES CORP	7.750	Oct 15, 2015	356	110.88	159	150	151	145	79	-66	-53	-49	-1.5	-46%	1.21	200	
AES CORP	8.000	Oct 15, 2017	1150	117.66	178	216	221	214	152	-62	-60	-49	-0.6	-29%	1.33	200	

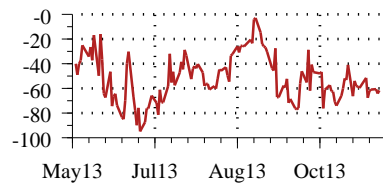


## US Corporate High Yield: Basis Charts

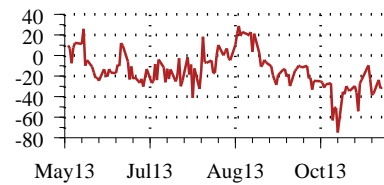
AES CORP 7.750 Oct 15, 2015



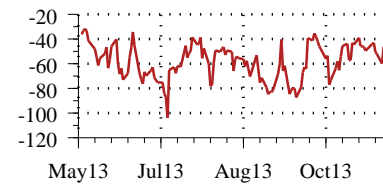
AES CORP 8.000 Oct 15, 2017



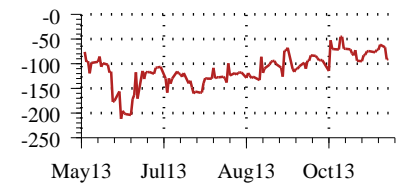
ALCOA INC 5.720 Feb 23, 2019



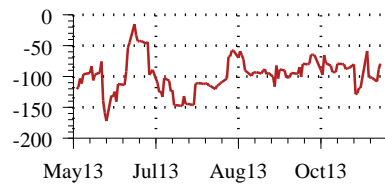
ALLY FINANCIAL 6.250 Dec 01, 2017



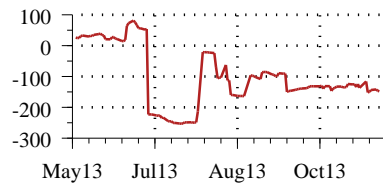
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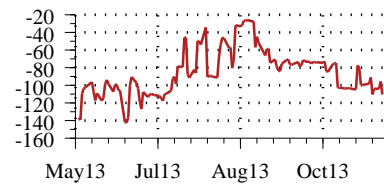
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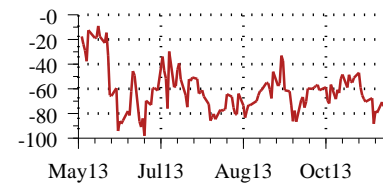
ARVINMERITOR 8.125 Sep 15, 2015



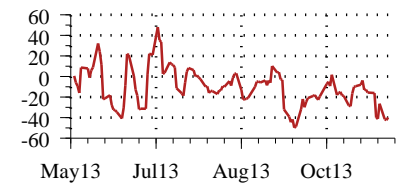
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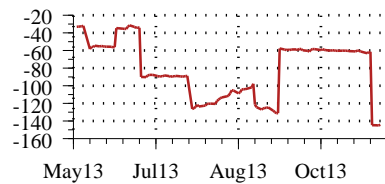
CABLEVISION SYS 7.750 Apr 15, 2018



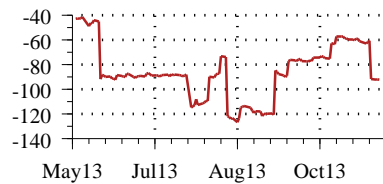
CABLEVISION SYS 8.000 Apr 15, 2020



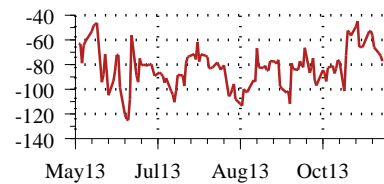
CENTEX CORP 5.250 Jun 15, 2015



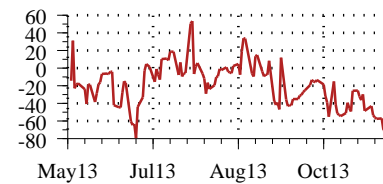
CENTEX CORP 6.500 May 01, 2016



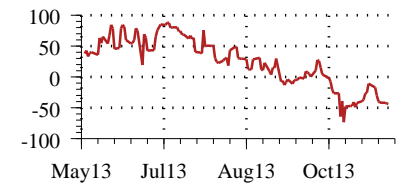
CENTURYLINK INC 6.000 Apr 01, 2017



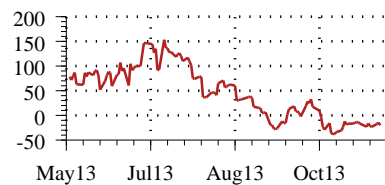
CHESAPEAKE ENRGY 6.500 Aug 15, 2017



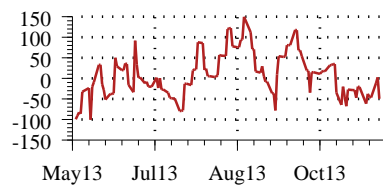
CHESAPEAKE ENRGY 7.250 Dec 15, 2018



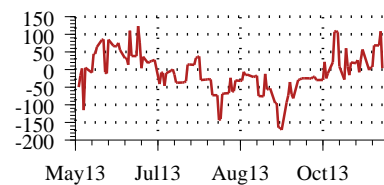
CHESAPEAKE ENRGY 6.875 Nov 15, 2020



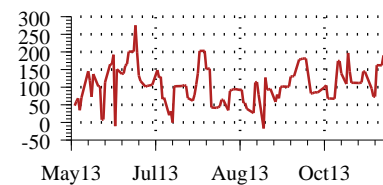
CLEAR CHANNEL 4.900 May 15, 2015



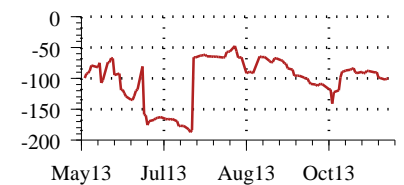
CLEAR CHANNEL 5.500 Dec 15, 2016



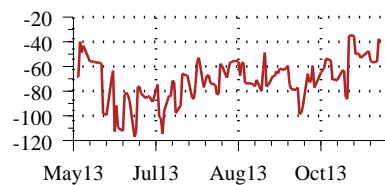
CLEAR CHANNEL 6.875 Jun 15, 2018



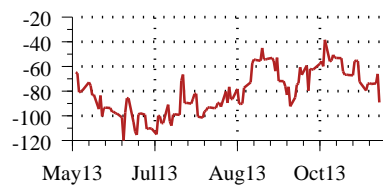
COLUMBIA/HCA 7.190 Nov 15, 2015



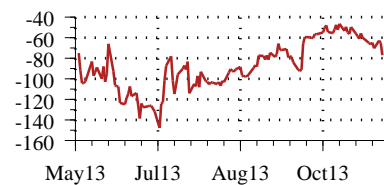
COMMERCIAL METAL 6.500 Jul 15, 2017



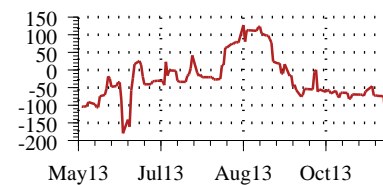
CONSTELLATION BR 7.250 Sep 01, 2016



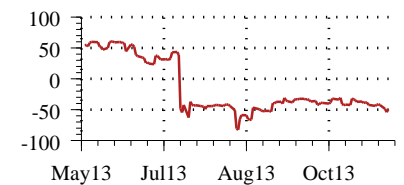
CONSTELLATION BR 7.250 May 15, 2017



COOPER TIRE&RUBR 8.000 Dec 15, 2019

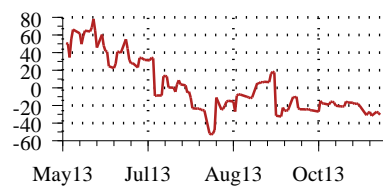


COVENTRY HEALTH 5.950 Mar 15, 2017

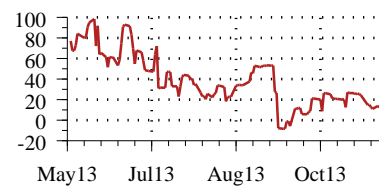


## US High Yield CDS Basis Charts

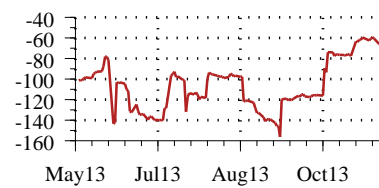
CSC HOLDINGS INC 7.875 Feb 15, 2018



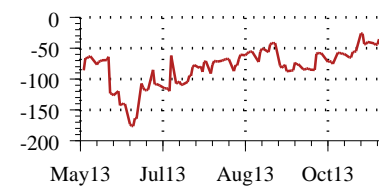
CSC HOLDINGS INC 7.625 Jul 15, 2018



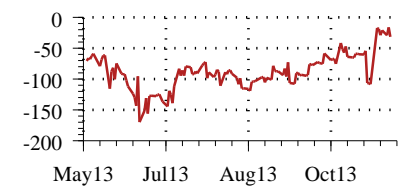
D.R. HORTON 5.625 Jan 15, 2016



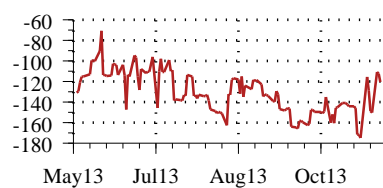
D.R. HORTON 6.500 Apr 15, 2016



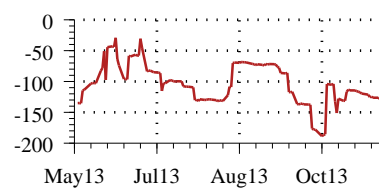
DEAN FOODS CO 7.000 Jun 01, 2016



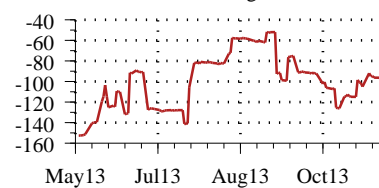
DEAN FOODS CO 6.900 Oct 15, 2017



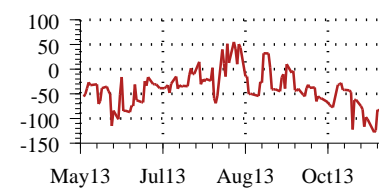
DILLARDS INC 6.625 Jan 15, 2018



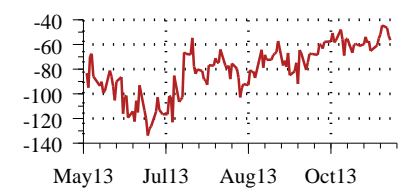
DILLARDS INC 7.130 Aug 01, 2018



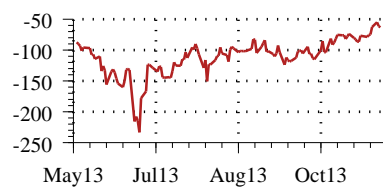
DONNELLEY & SONS 6.125 Jan 15, 2017



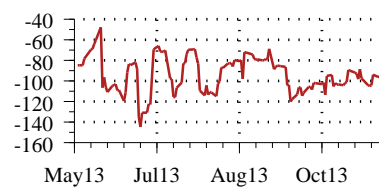
ECHOSTAR DBS 7.125 Feb 01, 2016



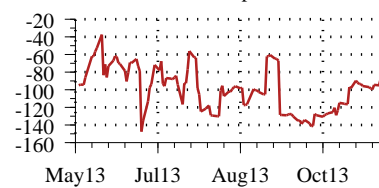
EL PASO CORP 7.000 Jun 15, 2017



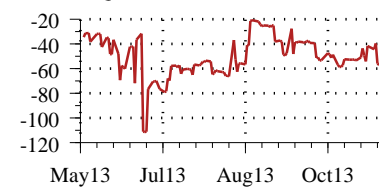
EL PASO CORP 7.250 Jun 01, 2018



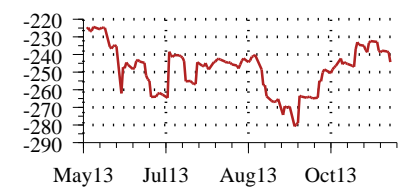
EL PASO CORP 6.500 Sep 15, 2020



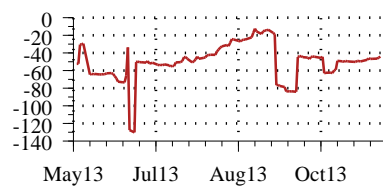
EMBARQ CORP 7.082 Jun 01, 2016



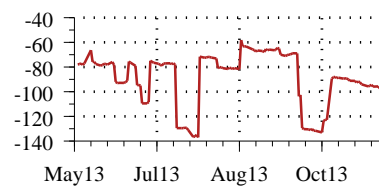
ENTERTAINMENT PR 7.750 Jul 15, 2020



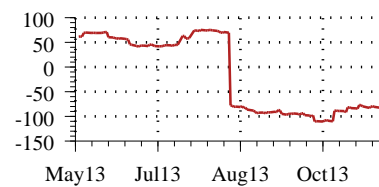
FAIRFAX FINL HLD 8.250 Oct 01, 2015



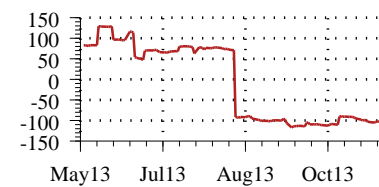
FAIRFAX FINL HLD 7.375 Apr 15, 2018



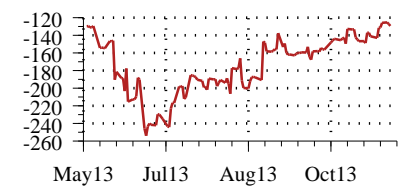
FIRST IND LP 5.750 Jan 15, 2016



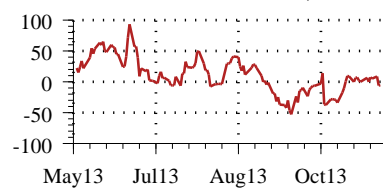
FIRST IND LP 5.950 May 15, 2017



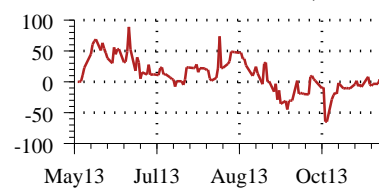
FRESENIUS MED 6.875 Jul 15, 2017



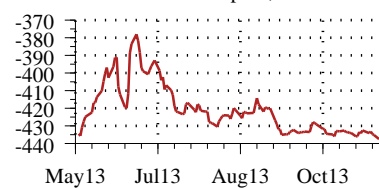
FRONTIER COMM 8.125 Oct 01, 2018



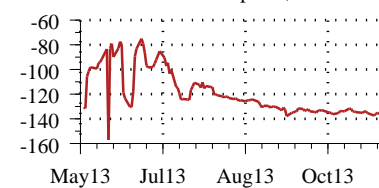
FRONTIER COMM 7.125 Mar 15, 2019



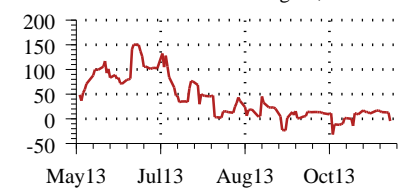
GANNETT CO 6.375 Sep 01, 2015



GANNETT CO 10.000 Apr 01, 2016

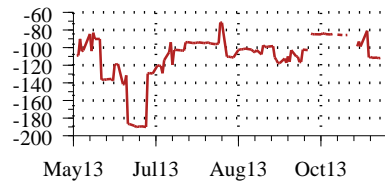


GOODYEAR TIRE 8.750 Aug 15, 2020

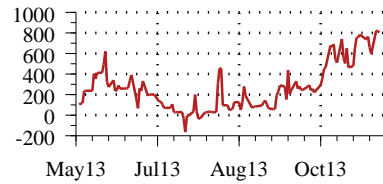


## US High Yield CDS Basis Charts

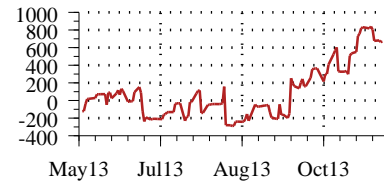
HANSON LTD 6.125 Aug 15, 2016



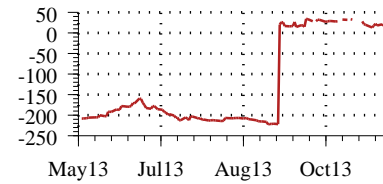
HARRAHS OPER CO 5.625 Jun 01, 2015



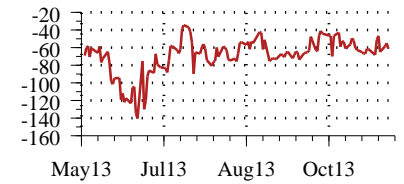
HARRAHS OPER CO 6.500 Jun 01, 2016



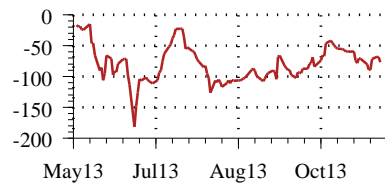
HBOS PLC 6.750 May 21, 2018



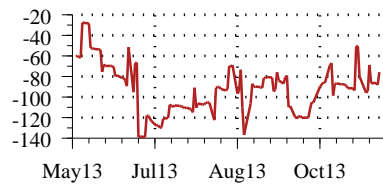
HCA INC 6.500 Feb 15, 2016



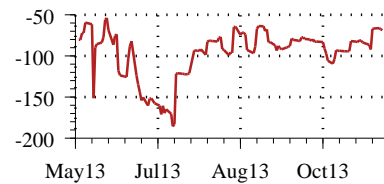
HCA INC 6.500 Feb 15, 2020



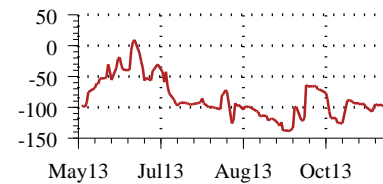
HEALTH NET INC 6.375 Jun 01, 2017



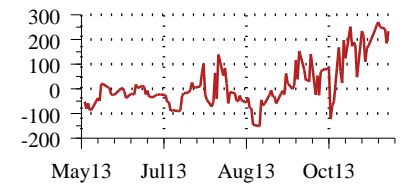
ISTAR FINANCIAL 5.875 Mar 15, 2016



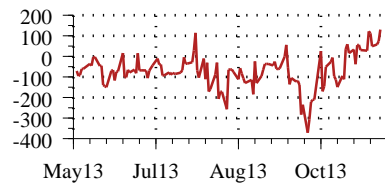
ISTAR FINANCIAL 5.850 Mar 15, 2017



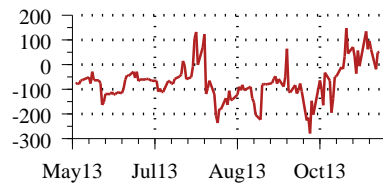
JC PENNEY CORP 6.875 Oct 15, 2015



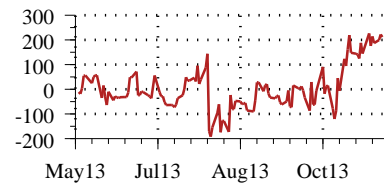
JC PENNEY CORP 7.650 Aug 15, 2016



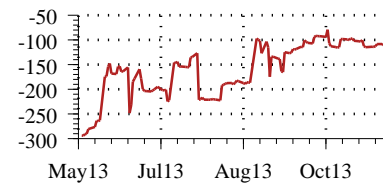
JC PENNEY CORP 7.950 Apr 01, 2017



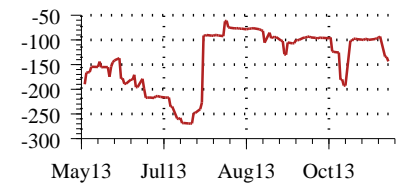
JC PENNEY CORP 5.750 Feb 15, 2018



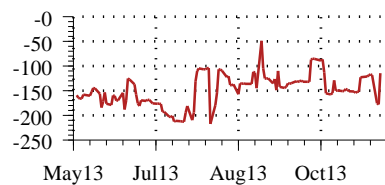
K HOVNANIAN ENTR 6.250 Jan 15, 2016



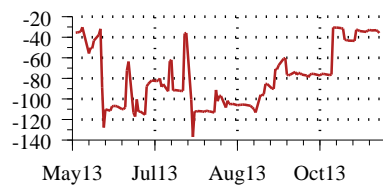
K HOVNANIAN ENTR 7.500 May 15, 2016



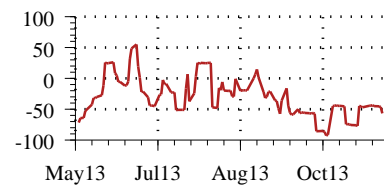
K HOVNANIAN ENTR 8.625 Jan 15, 2017



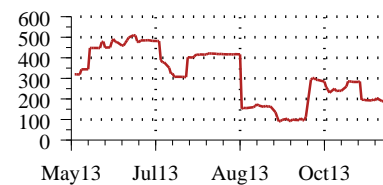
KB HOME 6.250 Jun 15, 2015



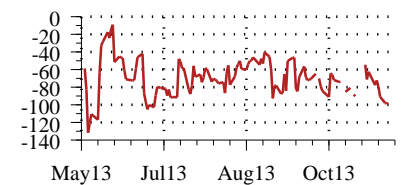
KB HOME 7.250 Jun 15, 2018



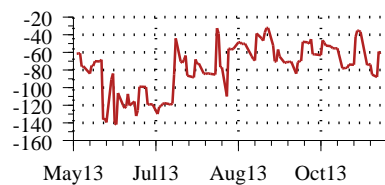
KNIGHT RIDDER 5.750 Sep 01, 2017



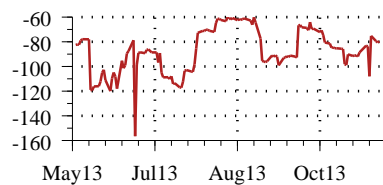
LAFARGE SA 6.500 Jul 15, 2016



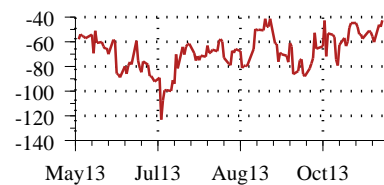
LENNAR CORP 5.600 May 31, 2015



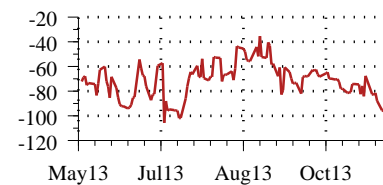
LENNAR CORP 6.500 Apr 15, 2016



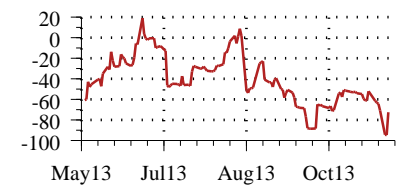
LIMITED BRANDS 6.900 Jul 15, 2017



LIMITED BRANDS 8.500 Jun 15, 2019

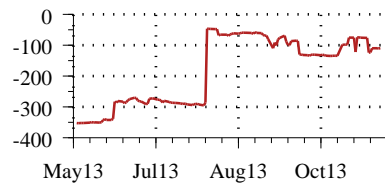


LIMITED BRANDS 7.000 May 01, 2020

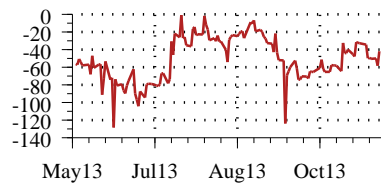


## US High Yield CDS Basis Charts

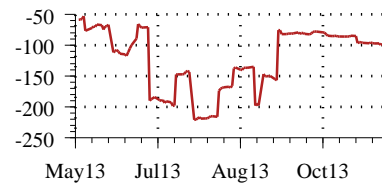
MASCO CORP 4.800 Jun 15, 2015



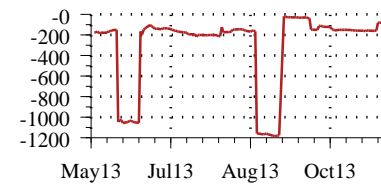
MASCO CORP 6.125 Oct 03, 2016



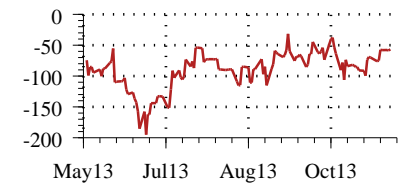
MDC HOLDINGS INC 5.375 Jul 01, 2015



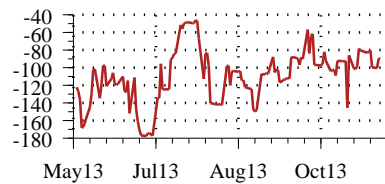
MGIC INVT CORP 5.375 Nov 01, 2015



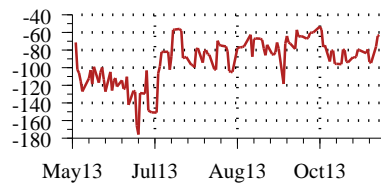
MGM MIRAGE 6.625 Jul 15, 2015



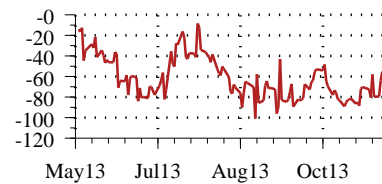
MGM MIRAGE 6.875 Apr 01, 2016



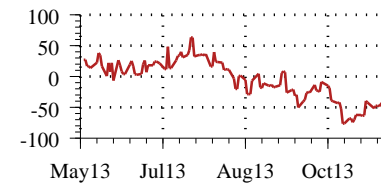
MGM MIRAGE 7.500 Jun 01, 2016



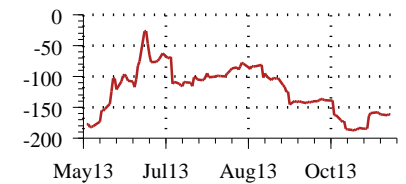
MGM MIRAGE 7.625 Jan 15, 2017



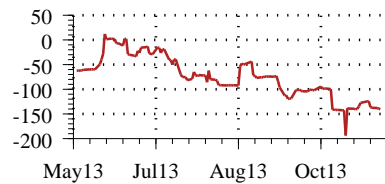
MGM MIRAGE 11.375 Mar 01, 2018



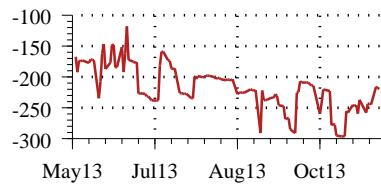
MGM RESORTS 10.000 Nov 01, 2016



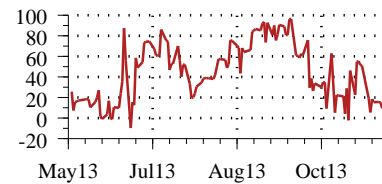
OWENS-ILL INC 7.800 May 15, 2018



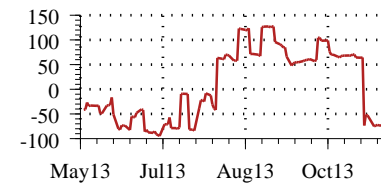
PACTIV LLC 8.125 Jun 15, 2017



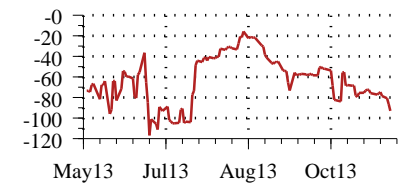
PEABODY ENERGY 7.375 Nov 01, 2016



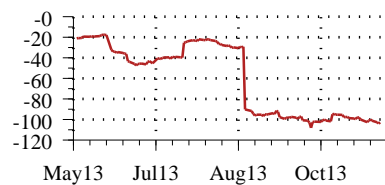
PHH CORP 9.250 Mar 01, 2016



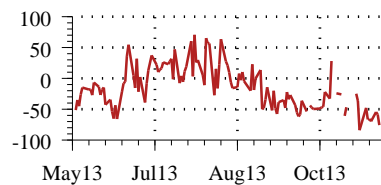
PULTE CORP 7.625 Oct 15, 2017



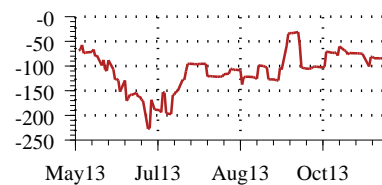
RECKSON OPER 6.000 Mar 31, 2016



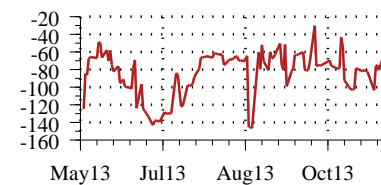
ROYAL BK SCOTLND 4.700 Jul 03, 2018



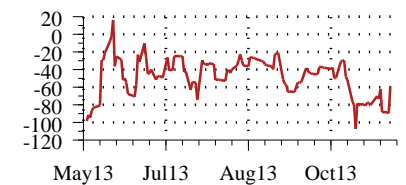
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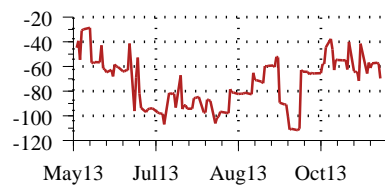
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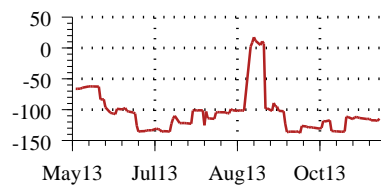
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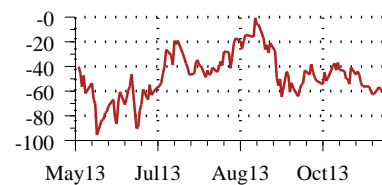
SEAGATE TECH HDD 6.800 Oct 01, 2016



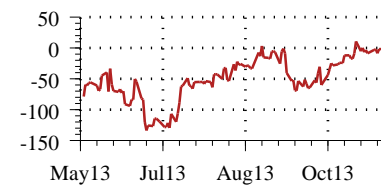
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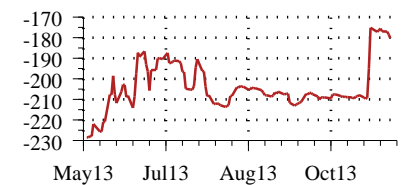
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SMITHFIELD FOODS 7.750 Jul 01, 2017

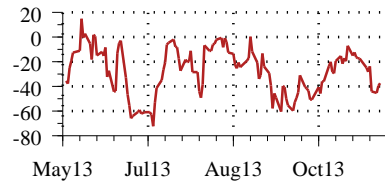


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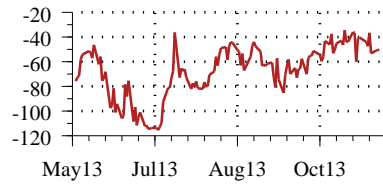


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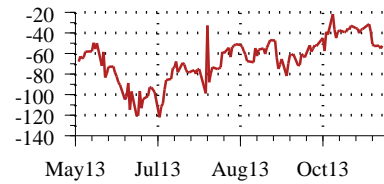
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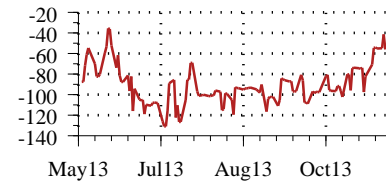
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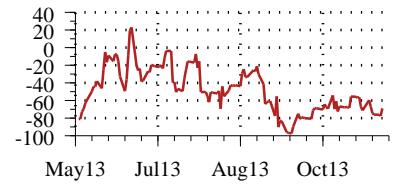
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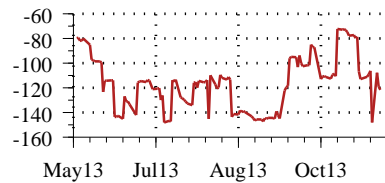
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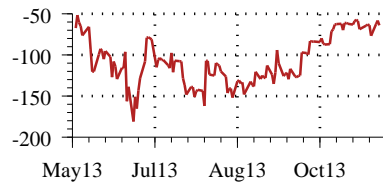
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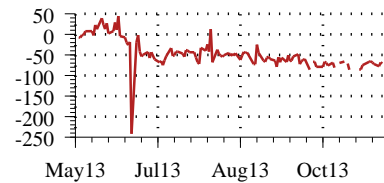
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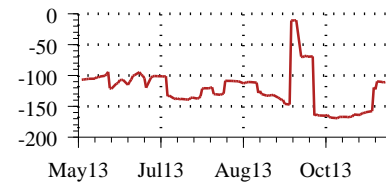
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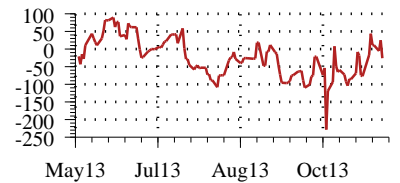
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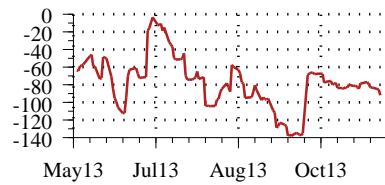
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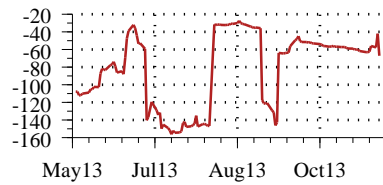
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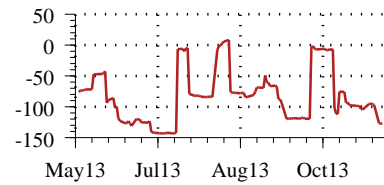
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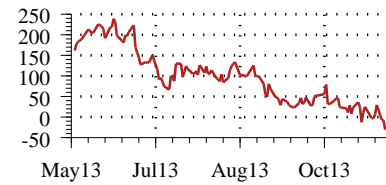
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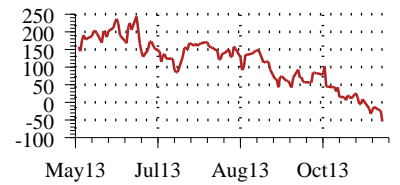
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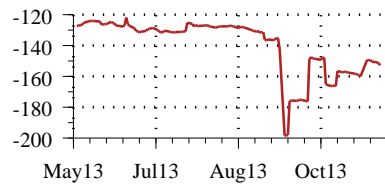
US STEEL CORP 6.050 Jun 01, 2017



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