Corporate hybrid daily statistics

BHP 6 1/2 10/22/77 nc-22

start days
end days

0

500

energy										
x over	isin	min	av	max	st dev	latest	z score	slope	steXY	correl
OMVAV 5 1/4 PERP nc-21	XS1294342792	33	149	307	31	154	0.2	0.02	31	0.96
OMVAV 2 7/8 PERP nc-24	XS1713462403	-48	67	233	37	90	0.6	0.13	25	0.92
OMVAV 6 1/4 PERP nc-25	XS1294343337	-47	49	230	39	85	0.9	0.15	24	0.91
REPSM 3 7/8 PERP nc-21	XS1207054666	-502	100	193	93	111	0.1	-0.08	91	0.95
REPSM 4 1/2 03/25/75 nc-25	XS1207058733	-70	28	114	27	-7	-1.3	0.06	24	0.96
REPSM 3 3/4 PERP nc-26	XS2185997884	-35	-12	17	16	-30	-1.1	-1.13	9	0.70
REPSM 4.247 PERP nc-28	XS2186001314	-56	-33	-9	14	-52	-1.3	-1.07	7	0.72
BPLN 3 1/4 PERP nc-26	XS2193661324	31	42	50	5	47	1.0	0.30	5	0.94
BPLN 3 5/8 PERP nc-29	XS2193662728	0	10	23	5	9	-0.1	-0.32	5	0.95
BPLN 4 1/4 PERP nc-27	XS2193663619	3	11	22	5	13	0.4	-0.04	5	0.94
BPLN 4 3/8 PERP nc-25	US05565QDU94	-25	5	44	24	28	0.9	7.08	11	-0.39
BPLN 4 7/8 PERP nc-30	US05565QDV77	-28	-6	19	15	4	0.7	4.18	9	-0.31
TOTAL 2 1/4 PERP nc-21	XS1195201931	-73	178	362	42	157	-0.5	0.03	42	0.90
TOTAL 3 7/8 PERP nc-22	XS1413581205	-53	162	299	36	166	0.1	0.06	34	0.92
TOTAL 2.708 PERP nc-23	XS1501167164	75	147	306	35	155	0.2	0.08	31	0.95
TOTAL 1 3/4 PERP nc-24	XS1974787480	73	134	272	40	143	0.2	0.18	32	0.96
TOTAL 2 5/8 PERP nc-25	XS1195202822	49	118	275	35	139	0.6	0.08	30	0.95
TOTAL 3.369 PERP nc-26	XS1501166869	49	111	313	47	140	0.6	0.13	39	0.92
BHP 4 3/4 04/22/76 nc-21	XS1309436753	-225	172	320	51	183	0.2	-0.02	51	0.91
BHP 5 5/8 10/22/79 nc-24	XS1309436910	52	111	282	41	181	1.7	0.12	32	0.92
BHP 6 3/4 10/19/75 nc-25	USQ12441AB91	-48	56	233	35	74	0.5	0.01	35	0.93
BHP 6 1/4 10/19/75 nc-20	USQ12441AA19	-651	167	589	106	95	-0.7	-0.09	105	0.64

28 121 358 32

168

1.4

0.03 32

0.94

XS1309437215

low beta x over isin min av max st dev latest z score slope steXY correl SOLBBB 5.118 PERP nc-21 XS1323897485 132 288 38 -1.4 0.00 38 0.94 80 SOLBBB 5.425 PERP nc-23 XS0992293901 -43 51 87 0.9 0.12 33 0.90 SOLBBB 4 1/4 PERP nc-23 BE6309987400 -91 30 224 49 0.4 0.22 32 0.88 SOLBBB 5.869 PERP nc-24 XS1323897725 -72 22 195 31 44 0.7 0.09 25 0.94 BAYNGR 2 3/8 04/02/75 nc-22 -219 25 263 104 0.16 58 DE000A14J611 68 1.2 0.73 BAYNGR 3 3/4 07/01/74 nc-24 DE000A11QR73 -109 -2 196 0.16 53 0.74 63 66 1.1 BAYNGR 2 3/8 11/12/79 nc-25 XS2077670003 -30 46 177 53 47 0.0 0.54 35 0.94 BAYNGR 3 1/8 11/12/79 nc-27 XS2077670342 -72 24 202 76 25 0.0 0.76 53 0.94 MRKGR 2 5/8 12/12/74 nc-21 XS1152338072 -41 170 336 47 -0.1 0.07 45 0.88 165 MRKGR 3 3/8 12/12/74 nc-24 XS1152343668 50 343 59 1.0 0.16 49 133 0.81 XS2011260531 132 297 0.40 39 0.92 MRKGR 1 5/8 06/25/79 nc-24 62 60 187 0.9 MRKGR 2 7/8 06/25/79 nc-29 XS2011260705 -10 82 338 86 130 0.6 0.53 62 0.92 AKEFP 4 3/4 PERP nc-20 FR0012278539 -278 165 326 73 178 0.02 73 0.89 AKEFP 2 3/4 PERP nc-24 FR0013425170 -32 64 214 41 70 0.1 0.24 29 AKEFP 1 1/2 PERP nc-25 9 97 222 47 -0.3 0.38 42 0.95 FR0013478252 81 LXSGR 4 1/2 12/06/76 nc-23 XS1405763019 -97 35 171 35 0.04 34 0.93 56 0.6 LHNVX 3 PERP nc-24 XS1713466495 -169 28 1.2 0.24 40 0.90 166 52 88 BNFP 1 3/4 PERP nc-23 FR0013292828 0 101 345 62 174 1.2 0.19 47 0.75 ECLEAR 2 5/8 04/11/48 nc-28 42 117 437 68 187 1.0 0.13 62 0.83 XS1797663967 346 2.4 0.05 DBOERS 2 3/4 02/05/41 nc-20 DE000A161W62 -12 216 384 54 53 0.82 DBOERS 1 1/4 06/16/47 nc-27 DE000A289N78 204 229 253 14 219 -0.7 -1.03 10 0.10 DBHNGR 0.95 PERP nc-25 -0.2 🛚 XS2010039035 109 203 433 97 180 0.69 81 0.87 DBHNGR 1.6 PERP nc-29 179 442 101 0.76 82 0.93 XS2010039548 85 169 -0.1

x over	isin	min	av	max	st dev	latest	z score		slope	steXY	correl
AMXLMM 6 3/8 09/06/73 nc-23	XS0969341147	-23	94	289		134	0.7		0.20	36	0.81
AMXLMM 6 3/8 09/06/73 nc-20	XS0969342384	16	147	290		62	-2.0		-0.05		0.94
BERTEL 3 04/23/75 nc-23	XS1222591023	-98	48	212		45	-0.1	į	0.06	35	0.93
BERTEL 3 1/2 04/23/75 nc-27	XS1222594472	-61	13	218		7	-0.1	ì	0.10	35	0.91
KPN 7 03/28/73 nc-23	USN4297BBC74	-258		265		11	0.5		-0.02		0.83
KPN 2 PERP nc-24	XS2069101868	-5	73	263		25	-0.7	<u> </u>	0.34	68	0.91
TELIAS 3 04/04/78 nc-23	XS1590787799	-15	77	300		140	1.0		0.22	44	0.73
TELIAS 1 3/8 05/11/81 nc-26	XS2082429890	44	154	303		131			0.09	65	0.94
SESGFP 4 5/8 PERP nc-22	XS1405777746	-551		90	97	56	0.9		-0.06		0.95
SESGFP 5 5/8 PERP nc-24	XS1405765659	-285		13	44	-58	0.7		0.00	45	0.96
ORAFP 4 PERP nc-21	XS1115490523	89	184	377		230	0.9		0.16	37	0.85
DRAFP 5 1/4 PERP nc-24	XS1028599287	-8	99	326		180	1.2		0.24	43	0.71
ORAFP 2 3/8 PERP nc-25	FR0013413887	19		348		163	0.8		0.39	50	0.86
DRAFP 5 PERP nc-26	XS1115498260	-32	57	319		147	1.3		0.25	47	0.64
ORAFP 1 3/4 PERP nc-26	FR0013447877	5	109	301		150	0.5		0.71	50	0.87
ORAFP 5 7/8 PERP nc-22	XS1028597315	46		430		203	1.1		0.23	46	0.71
ORAFP 5 3/4 PERP nc-23	XS1115502988	15	83	299		166	1.6		0.19	35	0.83
TELEFO 3 3/4 PERP nc-22	XS1490960942	-179		189		36	-0.1		0.13	37	0.90
TELEFO 2 5/8 PERP nc-23	XS1731823255		-133			19	1.1		0.13	73	0.09
TELEFO 3 PERP nc-23	XS1795406575	-169		139		6	0.6		0.38	36	0.82
TELEFO 5 7/8 PERP nc-24	XS1050461034	-112		134		18	0.6		0.21	30	0.86
TELEFO 4 3/8 PERP nc-24	XS1933828433	-155		139		3	0.3	5	0.18	31	0.86
TELEFO 3 7/8 PERP nc-26	XS1795406658		-140			-22	1.0		0.33	65	0.18
TELEFO 2.502 PERP nc-27	XS2109819859	-299	50	160		12	-0.7		0.40	50	0.18
TELEFO 2.302 PERP IIC-27 TELEFO 2.7/8 PERP IIC-27	XS2056371334		-10	143		-12	0.0	1	0.23	35	0.95
•						80	1.1			37	
/OD 3.1 01/03/79 nc-23	XS1888179477	-126		191					0.29		0.74
/OD 4.2 10/03/78 nc-28	XS1888179550	-172		197		65	1.3		0.33	45	0.62
/OD 4 7/8 10/03/78 nc-25	XS1888180996	-158		249		40	1.1		0.30	49 121	0.64
/OD 6 1/4 10/03/78 nc-24	XS1888180640	-801		478		12	0.6		0.50		0.08
/OD 7 04/04/79 nc-29	US92857WBQ24			424		-12	0.5		0.55	83	0.45
BRITEL 1.874 08/18/80 nc-25	XS2119468572	-65		179		-2	-0.9	_	-0.20		0.91
FXGR 2 7/8 PERP nc-25	XS2056730323	-106		186		33	0.5		0.50	41	0.94
FXGR 3 5/8 PERP nc-28	XS2056730679	-163		105		5	0.8		0.62		0.94
7 2 7/8 PERP nc-25	XS2114413565	-135		157		-70	-1.1		-0.13		0.94
/LVY 4.85 03/10/78 nc-23	XS1150695192	-10		270		146	1.8		0.07	32	0.93
VW 3 3/4 PERP nc-21	XS1048428012	-262		240		128	0.7		-0.01		0.95
/W 2 1/2 PERP nc-22	XS1206540806	-257		169		11	-0.5	2	0.08	40	0.93
/W 2.7 PERP nc-22	XS1629658755	-180		156		4	-	ų	0.09	36	0.92
/W 5 1/8 PERP nc-23	XS0968913342	-142		156		20	0.1	L	0.09	30	0.93
/W 3 3/8 PERP nc-24	XS1799938995	-157		133		-18	0.3	<u>.</u> "	0.15	35	0.87
/W 3 1/2 PERP nc-25	XS2187689034	-42		21	15	-27	-0.4	<u> </u>	-1.17		0.29
VW 4 5/8 PERP nc-26	XS1048428442	-130		107		-22	0.5		0.11	32	0.90
/W 3 7/8 PERP nc-27	XS1629774230	-167	-76	69	45	-35	0.9		0.13	35	0.88
VW 4 5/8 PERP nc-28	XS1799939027	-173	-84	99	48	-45	8.0		0.15	36	0.86
/W 3 7/8 PERP nc-29	XS2187689380	-67	-45	-8	14	-49	-0.3	ı.	-0.99	11	0.37
/W 3 1/2 PERP nc-30	XS1206541366	-119	-48	114	44	-30	0.4		0.08	41	0.91

utils x over	isin	min	av	may	st dev	latect	7 5001	·P	slope	cteVV	correl
ENGIFP 4 3/4 PERP nc-21	FR0011531730	64	av 186	375		225	0.8	-	0.17	0	0.84
ENGIFP 1 3/8 PERP nc-23	FR0011331730 FR0013310505	5	99	344		138	0.6		0.17	28	0.74
ENGIFP 3 7/8 PERP nc-24	FR0011942283	15	94	305		146	0.9		0.20	23	0.79
ENGIFP 3 1/4 PERP nc-24	FR0013398229	0	107	289		140	0.6		0.27	17	0.85
ENGIFP 1 5/8 PERP nc-25	FR0013431244	43		287		131	0.3		0.38	20	0.96
SEVFP 2 1/2 PERP nc-22	FR0012648590	32	117	274		128	0.3		0.11	22	0.90
SEVFP 2 7/8 PERP nc-24	FR0013252061	-33	72	272		101	0.6		0.16	21	0.86
SEVFP 1 5/8 PERP nc-26	FR0013445335	17	96	365		88	-0.1		0.43	40	0.95
EDF 4 1/8 PERP nc-22	FR0011697010		93	316		155	1.4		0.13	41	0.88
EDF 4 PERP nc-24	FR0013367612	-119	-11	177	51	23	0.7		0.21	34	0.86
EDF 5 3/8 PERP nc-25	FR0011401751	-136	-28	157		20	1.0		0.15	33	0.86
EDF 5 PERP nc-26	FR0011697028	-180	-50	173	59	7	1.0		0.19	36	0.78
EDF 3 PERP nc-27	FR0013464922	-75	25	234	74	-11	-0.5	Ĺ	0.38	52	0.90
EDF 6 PERP nc-26	FR0011401728	204	306	708	93	376	0.8		0.14	76	-0.83
EDF 5 7/8 PERP nc-29	FR0011700293	204	306	708	93	376	0.8		0.14	76	-0.78
EDF 5 1/4 PERP nc-23	USF2893TAF33	-580	22	394	155	-12	-0.2		0.45	123	0.04
EDF 5 5/8 PERP nc-24	USF2893TAM83	-187	-42	97	39	-36	0.2	I	0.03	46	0.92
ENBW 3 5/8 04/02/76 nc-21	XS1044811591	-66	157	336	54	187	0.6		0.13	39	0.84
ENBW 3 5/8 04/02/76 nc-21	XS1044811591	-66	157	336	54	187	0.6		0.13	39	0.84
ENBW 3 3/8 04/05/77 nc-22	XS1405770907	-89	110	264	49	188	1.6		0.15	36	0.87
ENBW 1 1/8 11/05/79 nc-24	XS2035564975	47	137	300	66	166	0.4		0.49	17	0.94
ENBW 1 7/8 06/29/80 nc-26	XS2196328608	122	144	172	14	141	-0.2	ĺ	-1.65	3	0.34
ENBW 1 5/8 08/05/79 nc-27	XS2035564629	13	112	328	77	142	0.4		0.54	25	0.94
ENBW 5 1/8 04/05/77 nc-22	XS1498442521	-83	109	619	109	115	0.1)	0.14	102	0.24
RWE 2 3/4 04/21/75 nc-20	XS1219498141	-286	102	180	59	93	-0.1	Į.	-0.04	68	0.96
RWE 3 1/2 04/21/75 nc-25	XS1219499032	-39	38	308	62	95	0.9		0.21	36	0.76
RWE 6 5/8 07/30/75 nc-26	XS1254119750	-141	-15	365	65	-5	0.1		0.02	66	0.73
TENN 2.995 PERP nc-24	XS1591694481	-10	79	278	57	129	0.9		0.19	23	0.80
VATFAL 3 03/19/77 nc-27	XS1205618470	-23	50	306	65	111	0.9		0.17	45	0.78
VATFAL 6.1 11/19/78 nc-23	XS1322373017	-472	99	360	176	-51	-0.9	ĺ	-0.70	104	0.43
ENELIM 2 1/2 11/24/78 nc-23	XS1713463716	-137	22	204	72	114	1.3		0.31	28	0.69
ENELIM 5.451 01/10/74 nc-24	XS0954675129	-162	97	412	120	116	0.2	1	-0.08	113	0.37
ENELIM 3 1/2 05/24/80 nc-25	XS2000719992	-88	46	250	72	95	0.7		0.49	29	0.80
ENELIM 3 3/8 11/24/81 nc-26	XS1713463559	-123	-9	241	73	71	1.1		0.28	34	0.64
ENELIM 7 3/4 09/10/75 nc-20	XS0954674825	-236	96	221	85	221	1.5		0.08	91	0.92
ENELIM 6 5/8 09/15/76 nc-21	XS1014987355	-35	89	277	60	150	1.0		0.22	37	0.82
ENELIM 8 3/4 09/24/73 nc-23	US29265WAA62	-365	-9	527	160	20	0.2	I	0.69	149	0.32
IBESM 1 7/8 PERP nc-23	XS1721244371	-18	97	345	74	167	0.9		0.27	27	0.63
IBESM 2 5/8 PERP nc-24	XS1797138960	-4	100	354	73	176	1.0		0.28	28	0.62
IBESM 3 1/4 PERP nc-24	XS1890845875	-7	103	343	76	169	0.9		0.40	24	0.74
NTGYSM 4 1/8 PERP nc-22	XS1139494493	-20	58	212		70	0.3		0.13	27	0.92
NTGYSM 3 3/8 PERP nc-24	XS1224710399	-57		220		42			0.18		0.85
CNALN 3 04/10/76 nc-21	XS1216020161	-331		220		-88	-1.2	•	-0.10		0.91
CNALN 5 1/4 04/10/75 nc-25	XS1216019585	-170		230		-93	-0.6	_	-0.04		0.80
NGGLN 1 5/8 12/05/79 nc-24	XS2010044977	7		266		141	0.5		0.66		0.86
NGGLN 2 1/8 09/05/82 nc-27	XS2010045511	-30	82	310		113	0.4		0.74		0.90
NGGLN 5 5/8 06/18/73 nc-25	XS0903532090	-72	33	345		136	1.4		0.14		0.66
SSELN 3 7/8 PERP nc-20	XS1196714429	-119		284		174	1.7		-0.03		0.91
SSELN 3 5/8 09/16/77 nc-22	XS1572349865	-54		331		96	0.8		0.10		0.72
SSELN 3.74 PERP nc-26	XS2195190876	35	43		6	50	1.1		1.06		0.44
SSELN 2 3/8 PERP nc-21	XS1196713298	-105		294		91	0.1		0.02		0.92
SSELN 3 1/8 PERP nc-27	XS2195190520	24	38	46	6	46	1.5		0.70		0.38
SSELN 4 3/4 09/16/77 nc-22	XS1572343744	-269		513		-24	0.0		0.10		-0.03
ALLRNV 1 5/8 PERP nc-25	XS1757377400	104		435		234	1.0		0.12		0.90
ORSTED 6 1/4 06/26/13 nc-23	XS0943370543	3		344		195	1.2		0.27		0.61
ORSTED 2 1/4 11/24/17 nc-24	XS1720192696	4	94	301		178	1.4		0.20	26	0.77
ORSTED 1 3/4 12/09/19 nc-27	XS2010036874	32		316		152	0.0	1	0.90		0.89
STEDIN 3 1/4 PERP nc-21	XS1141810991	82		365		125	-0.6		0.09	28	0.89
EDPPL 4.496 04/30/79 nc-24	PTEDPKOM0034			231		62	0.5	_	0.43		0.71
EDPPL 1.7 07/20/80 nc-25	PTEDPLOM0017			343		36	-0.2		0.78		0.92
						120					(1.70)
ELIASO 2 3/4 PERP nc-23 EVKGR 2 1/8 07/07/77 nc-22	BE0002597756 DE000A2GSFF1	15 -23	92	339 282		128 83	0.6 -0. 5		0.21		0.79 0.92

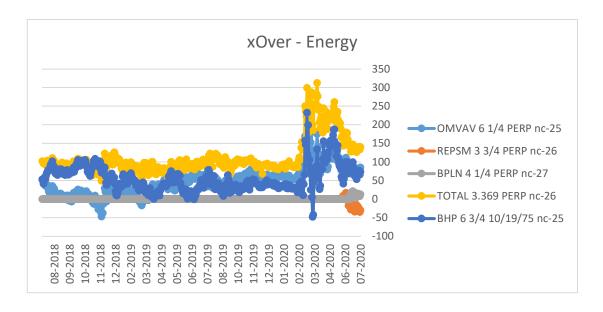
reit										
x over	isin	min av	max	st dev	latest	z score		slope	steXY	correl
ACFP 4 3/8 PERP nc-24	FR0013399177	-692 -10	7 43	148	-276	-1.1		-0.59	0	0.97
ACFP 2 5/8 PERP nc-25	FR0013457157	-411 -15	8 -12	129	-316	-1.2	ĺ	-1.49	101	0.92
FERSM 2.124 PERP nc-23	XS1716927766	-421 -14	2 23	84	-56	1.0		0.10	99	0.85
ANNGR 4 PERP nc-21	XS1117300837	-33 125	316	43	154	0.7		0.15	128	0.89
ULFP 2 1/8 PERP nc-23	FR0013330529	-489 13	183	121	-275	-2.4		-0.32	131	0.89
ULFP 2 7/8 PERP nc-26	FR0013330537	-265 -1	168	70	-173	-2.4		-0.18	114	0.93
AKFAST 3 7/8 10/05/78 nc-23	XS1788973573	-241 -36	79	51	-18	0.4		0.15	112	0.90
AKFAST 2.249 05/17/81 nc-26	XS2110077299	-85 -5	90	39	-50	-1.1		-0.26	162	0.95
BALDER 3 03/07/78 nc-23	XS1677911825	-209 -66	131	44	-79	-0.3		0.02	119	0.94
TLGGR 3 3/8 PERP nc-24	XS2055106210	-138 -30	184	61	-120	-1.5		0.01	151	0.89
HEIBOS 3.248 PERP nc-24	XS2010037765	-309 -95	29	53	-56	0.7		0.17	101	0.95
SBBBSS 4 5/8 PERP nc-24	XS1974894138	-586 -11	3 234	101	-106	0.1)	0.17	143	0.74
SBBBSS 2.624 PERP nc-25	XS2010032618	-509 -10	1 152	112	-118	-0.1		-1.04	182	0.79
ARNDTN 3 3/4 PERP nc-23	XS1508392625	-247 -18	220	59	-46	-0.5		0.17	128	0.80
ARNDTN 2 1/8 PERP nc-24	XS1752984440	-270 -76	132	65	-88	-0.2		0.12	120	0.83
ARNDTN 2 7/8 PERP nc-25	XS2027946610	-183 -46	145	46	-66	-0.4		0.00	103	0.96
ARNDTN 5 1/4 PERP nc-23	XS1634523754	-247 -10	5 89	57	-103	0.0)	0.05	110	0.91
ARNDTN 4 3/4 PERP nc-24	XS2017788592	-156 -67	210	60	-59	0.1		0.27	126	0.87
GYCGR 3 3/4 PERP nc-22	XS1191320297	-136 63	193	61	125	1.0		0.18	114	0.87
GYCGR 2 3/4 PERP nc-23	XS1491364953	-80 23	189	43	67	1.0		0.14	116	0.90
GYCGR 2 1/2 PERP nc-23	XS1811181566	-174 -8	196	67	59	1.0		0.22	128	0.75
CPIPGR 4 3/8 PERP nc-23	XS1819537132	-353 -18	8 51	68	-161	0.4		0.14	122	0.81
CPIPGR 4 7/8 PERP nc-25	XS1982704824	-349 -21	8 -12	65	-174	0.7		0.33	110	0.85

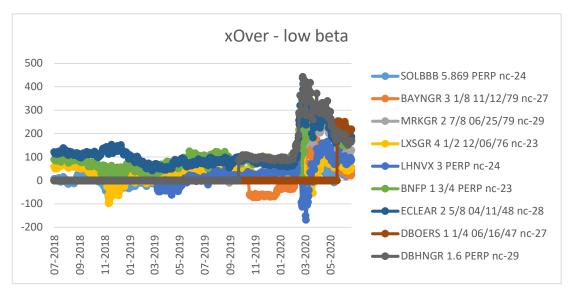
others								
x over	isin	min av	max st dev	latest z scor	e	slope	steXY	correl
FIRMEN 3 3/4 PERP nc-25	XS2182055009	19 39	56 10	49 1.0		0.42	9	0.86
EVKGR 2 1/8 07/07/77 nc-22	DE000A2GSFF1	-23 102	282 36	83 -0.5		0.05	34	0.92
LHAGR 5 1/8 08/12/75 nc-21	XS1271836600	#### -587	7 167 1593	-3545 -1.9		-4.69	1255	0.82
SOFTBK 6 PERP nc-23	XS1642682410	#### -331	l 76 295	-440 -0.4		-0.77	293	0.01
SOFTBK 6 7/8 PERP nc-27	XS1642686676	-788 -334	1 -213 65	-356 -0.3		-0.13	59	0.88

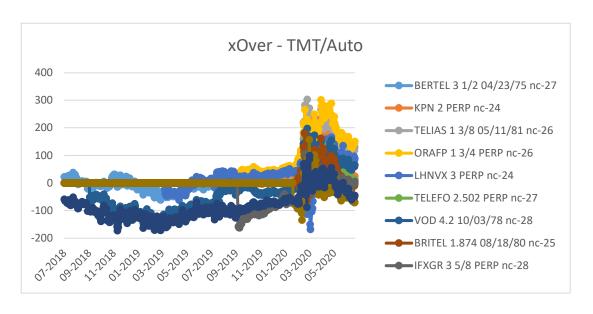
corporate hybrid pairs by z-score

low z score pairs											
		min	av	max	st dev	latest	hValue	slope	steXY	correl	Z
BNFP 1 3/4 PERP nc-23	FR0013292828										
ENGIFP 4 3/4 PERP nc-21	FR0011531730	-69	85	197	33	51	-13	-0.03	33	0.90	-1.04
- ,	XS2011260705	20	70	404		20			40	0.04	4.76
DBHNGR 1.6 PERP nc-29	XS2010039548	38	73	124	56	39	-40	-0.08	19	0.91	-1.76
LXSGR 4 1/2 12/06/76 nc-23	XS1405763019										
EVKGR 2 1/8 07/07/77 nc-22	DE000A2GSFF1	-23	67	174	53	27	-20	0.01	28	0.96	-1.45
211.01.2 2,0 07,07,77 22	22000/1200/12		0.			_,		0.01		0.50	25
BNFP 1 3/4 PERP nc-23	FR0013292828										
ULFP 2 1/8 PERP nc-23	FR0013330529	-748	-88	22	170	-449	-47	-0.52	131	0.53	-2.75
ULFP 2 7/8 PERP nc-26	FR0013330537										
ULFP 2 1/8 PERP nc-23	FR0013330529	-238	14	67	170	-102	-38	-0.14	45	0.99	-2.56
BHP 5 5/8 10/22/79 nc-24	XS1309436910		_								
TOTAL 2 5/8 PERP nc-25	XS1195202822	-95	7	74	34	-42	-29	-0.03	18	0.96	-2.76
DBHNGR 1.6 PERP nc-29	XS2010039548										
DBHNGR 0.95 PERP nc-25	XS2010039348 XS2010039035	-32	24	46	49	10	-18	-0.07	12	0.98	-1.16
DBINION 0.55 I EM THE 25	X32010033033	32		10	15	10	10	0.07		0.50	1.10
ORAFP 1 3/4 PERP nc-26	FR0013447877										
TOTAL 3.369 PERP nc-26	XS1501166869	-61	30	91	30	-10	-26	-0.28	23	0.90	-1.75
BNFP 1 3/4 PERP nc-23	FR0013292828										
TOTAL 2.708 PERP nc-23	XS1501167164	-88	46	123	36	-19	-31	-0.12	26	0.87	-2.49

high z score pairs TOTAL 3.369 PERP nc-26	XS1501166869										
				474	46	47	40	0.00	20	0.00	4.26
ECLEAR 2 5/8 04/11/48 nc-28	XS1797663967 -4	14	6	171	46	47	19	0.00	30	0.88	1.36
EVKGR 2 1/8 07/07/77 nc-22	DE000A2GSFF1										
TOTAL 2.708 PERP nc-23	XS1501167164 -3	88	45	174	36	72	13	0.02	38	0.93	0.71
REPSM 4 1/2 03/25/75 nc-25	XS1207058733										
TOTAL 2 5/8 PERP nc-25	XS1195202822 34	4	90	212	34	146	32	0.03	36	0.97	1.56
REPSM 4 1/2 03/25/75 nc-25	XS1207058733										
OMVAV 6 1/4 PERP nc-25	XS1294343337 -2	20	21	145	41	92	43	0.09	23	0.97	3.10
ULFP 2 7/8 PERP nc-26	FR0013330537										
ORAFP 1 3/4 PERP nc-26	FR0013447877 -1	L2	143	530	32	323	33	1.54	91	0.73	1.99
-											
ULFP 2 1/8 PERP nc-23	FR0013330529										
ORAFP 5 1/4 PERP nc-24	XS1028599287 -3	32	86	741	23	455	48	0.57	125	0.52	2.96
•											
SOLBBB 4 1/4 PERP nc-23	BE6309987400										
SOLBBB 5.425 PERP nc-23	XS0992293901 -1	L5	24	70	44	36	14	-0.04	16	0.99	0.74
ULFP 2 1/8 PERP nc-23	FR0013330529										
SOLBBB 5.425 PERP nc-23	XS0992293901 -6	59	38	569	44	362	51	0.44	106	0.82	3.06
		-					-				
ULFP 2 7/8 PERP nc-26	FR0013330537										
LXSGR 4 1/2 12/06/76 nc-23	XS1405763019 -8	34	35	355	57	229	44	0.23	66	0.86	2.94

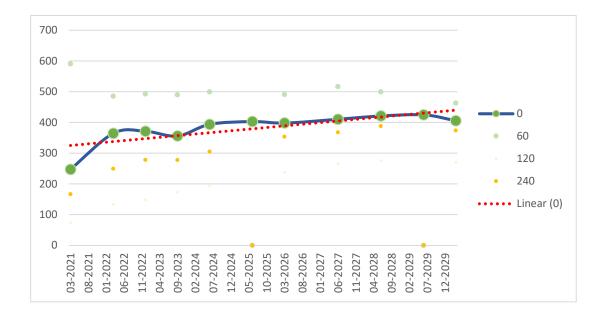






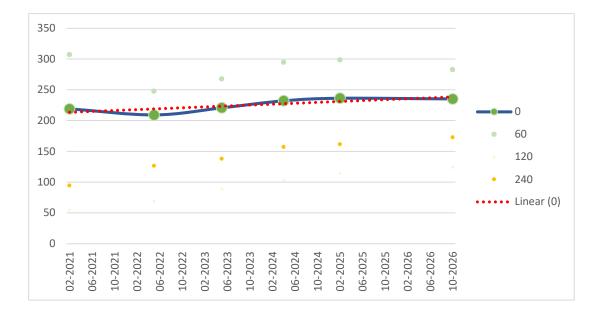
corporate curves

VW eur Curve	yrs	maturity	0	60	120	240	slope
VW 3 3/4 PERP nc-21	0.7	24/03/2021	248	591	74	167	
VW 2 1/2 PERP nc-22	1.7	20/03/2022	365	486	133	249	118
VW 2.7 PERP nc-22	2.4	14/12/2022	371	493	149	278	9 👖
VW 5 1/8 PERP nc-23	3.1	04/09/2023	356	490	173	277	. <u>2</u> 1
VW 3 3/8 PERP nc-24	4.0	27/06/2024	394	499	194	305	46
VW 3 1/2 PERP nc-25	4.9	17/06/2025	403	-	-	-	10
VW 4 5/8 PERP nc-26	5.7	24/03/2026	398	491	238	354	-6
VW 3 7/8 PERP nc-27	6.9	14/06/2027	410	517	266	368	10
VW 4 5/8 PERP nc-28	8.0	27/06/2028	421	499	276	388	10
VW 3 7/8 PERP nc-29	8.9	17/06/2029	425	-	-	-	4
VW 3 1/2 PERP nc-30	9.7	20/03/2030	406	463	270	374	.2 5
slope			7 13	⊸ -6	♠ 22	1 22	

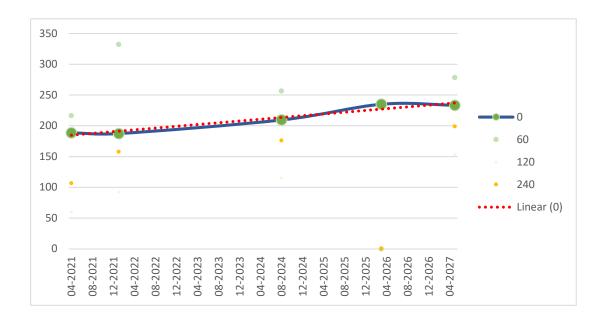


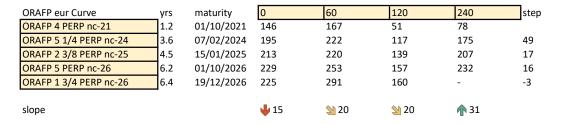


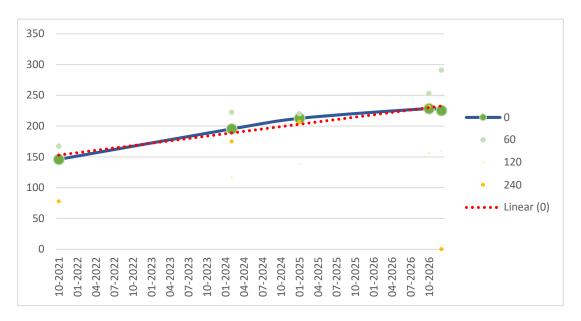
Total eur Curve	yrs	maturity	0	60	120	240	step
TOTAL 2 1/4 PERP nc-21	0.6	26/02/2021	219	307	55	95	
TOTAL 3 7/8 PERP nc-22	1.8	18/05/2022	209	248	69	126	-10
TOTAL 2.708 PERP nc-23	2.8	05/05/2023	221	268	89	138	11
TOTAL 1 3/4 PERP nc-24	3.7	04/04/2024	232	295	103	157	12
TOTAL 2 5/8 PERP nc-25	4.6	26/02/2025	236	299	114	162	4
TOTAL 3.369 PERP nc-26	6.2	06/10/2026	235	283	124	173	-1
slope			4 0	1	J 0	1	



ENBW eur Curve	yrs	maturity	0	60	120	240	step
ENBW 3 5/8 04/02/76 nc-21	0.7	02/04/2021	189	217	60	107	<u>_</u>
ENBW 3 3/8 04/05/77 nc-22	1.5	05/01/2022	187	332	92	158	-1
ENBW 1 1/8 11/05/79 nc-24	4.1	05/08/2024	210	256	115	176	22
ENBW 1 7/8 06/29/80 nc-26	5.7	30/03/2026	235	-	-	-	26
ENBW 1 5/8 08/05/79 nc-27	6.8	05/05/2027	234	278	154	199	-2
•							
slope			→ 9	y 2	1 4	1 3	







hybrids top 10, by z-score

top 10: bonds that have $\ensuremath{\textbf{cheapened}}$ relative to xover

x over	isin	min	av	max	st dev	latest	z score	ссу	steXY	correl r	ank	rh sector
REPSM 4 1/2 03/25/75 nc-25	XS1207058733	-27	41	114	25	-7	-1.9	EUR	22	0.99	L91	Energy
TLGGR 3 3/8 PERP nc-24	XS2055106210	-138	-22	184	61	-120	-1.6	EUR	60	0.90	L90	REIT
ARNDTN 3 3/4 PERP nc-23	XS1508392625	-64	33	220	50	-46	-1.6	EUR	50	0.93	L89	REIT
REPSM 4.247 PERP nc-28	XS2186001314	-56	-33	-9	14	-52	-1.3	EUR	7	0.72	L88	Energy
ULFP 2 7/8 PERP nc-26	FR0013330537	-265	-44	168	99	-173	-1.3	EUR	62	0.93	L87	REIT
ACFP 2 5/8 PERP nc-25	FR0013457157	-411	-158	-12	129	-316	-1.2	EUR	60	0.92	L86	REIT
ULFP 2 1/8 PERP nc-23	FR0013330529	-489	-68	183	170	-275	-1.2	EUR	101	0.88	L85	REIT
AMXLMM 6 3/8 09/06/73 nc-20	XS0969342384	16	127	290	54	62	-1.2	GBP	34	0.95	L84	TMT/ AUTO
AKFAST 2.249 05/17/81 nc-26	XS2110077299	-85	-5	90	39	-50	-1.	EUR	38	0.95	L83	REIT
REPSM 3 3/4 PERP nc-26	XS2185997884	-35	-12	17	16	-30	-1.1	EUR	9	0.70	L82	Energy

top 10: bonds that have richened relative to xover

x over	isin	min	av	max	st dev	latest	z score	ссу	steXY	correl ra	ank	rh sector
SSELN 3.74 PERP nc-26	XS2195190876	35	43	51	6	50	1.1	GBP	4	0.44 1	.0	UTILS
VLVY 4.85 03/10/78 nc-23	XS1150695192	2-1	101	270	39	146	1.1	EUR	37	0.96 9)	TMT/ AUTO
ERFFP 3 1/4 PERP nc-25	XS1716945586	-285	-117	17	59	-48	1.2	EUR	40	0.91 8	3	missing
ENELIM 7 3/4 09/10/75 nc-20	XS0954674825	-236	100	221	101	221	1.2	GBP	92	0.96 7	7	UTILS
SSELN 3 7/8 PERP nc-20	XS1196714429	-119	82	284	71	174	1.3	GBP	70	0.91 6	5	UTILS
DBOERS 2 3/4 02/05/41 nc-20	DE000A161W6	-12	230	384	84	346	1.4	EUR	64	0.82 5	;	Low Beta
ERFFP 4 7/8 PERP nc-23	XS1224953882	2-251	-86	62	76	21	1.4	EUR	46	0.84	ļ	missing
SSELN 3 1/8 PERP nc-27	XS2195190520	24	38	46	6	46	1.5	EUR	6	0.38 3	3	UTILS
TRAFIG 7 1/2 PERP nc-24	XS2033327854	1####	-680	-513	107	-513	1.6	EUR	105	0.89 2	<u> </u>	missing
SBRYLN 6 1/2 PERP nc-20	XS1268050397	-439	59	667	211	667	2.9	GBP	205	0.89		missing

items	191							
isin	min	av	max	st dev	latest	z score ccy	steXY	correl rank rh sector
max	204	346	708	2172	667	2.9	####	0.9 <mark>9</mark>
q3	30	137	311	81	142	0.3	66.5	0.96
average	-193	23	218	91	13	0.0	74.1	0.85
q1	-177	-3	149	45	-12	-0 B	38.3	0.90
min	####	####	###	5	-3545	1 .	4.0	-0. 95