

KYNEX Stress Test Framework

We simulate five scenarios labeled Bear Stress, Vol Stress, Credit Stress, Bull Stress and Takeout Stress. The details of each scenario are presented below.

Bear Stress:

We simulate declining equity markets, deteriorating credit markets, and falling interest rates simultaneously in this scenario. In times of such market distress we have observed a spike in volatilities for listed equity options and warrants. In order to capture this, we increase the implied volatility by 20% (i.e. 20 goes to 24 and 40 goes to 48) for equity options and warrants. However, owing to the risky characteristics of the option embedded in a convertible we have not seen a benefit to convertible securities from an increase in risk-free volatilities when financial markets are exhibiting a flight to quality. Therefore, we leave the volatility unchanged for convertible securities.

The magnitude of the drop in underlying stock price is a function of its 30-day historical volatility. We take the stock down by $30dVol / \sqrt{26}$.

We simulate an overall drop in interest rates and a simultaneous steepening of the curve to capture an expected action from the Fed and the markets' anticipation of higher long-term inflation. We drop the 2 year rate by 20% and the 10 year rate by 10% and calibrate the other rates on the curve.

We widen the credit spreads based on the magnitude of the equity drop as well as the current implied spread. The larger the equity drop and/or wider the initial implied spread, the wider the simulated credit spread is. We have also observed, the spreads on convertible securities widen more than the corporate bonds, perhaps due to the additional sensitivity to stock movement. Therefore we use two different matrices; we present the spread factors used for convertibles ([Fig1](#)) and corporate bonds ([Fig2](#)) at the end of this document.

Vol Stress:

We simulate a contraction in volatilities (cheapening) for equity derivatives by dropping the volatility 20% (20 goes to 16 and 40 goes to 32) while maintaining everything else unchanged.

Credit Stress:

We simulate deterioration in the credit markets by widening the credit spreads based on the matrix ([Fig3](#)) presented at the end of this document while maintaining everything else unchanged.

Bull Stress:

We simulate rising equity markets, improving credit markets, and rising interest rates simultaneously in this scenario. We have observed a contraction in risk-free volatilities during

times of rising equity markets and to capture this, we lower the implied volatility by 10% (20 goes to 18 and 40 goes to 36) for listed equity options and warrants. We do not change the volatility for convertible securities.

The magnitude of the increase in underlying stock price is based on its 30-day historical volatility. We take the stock up by $30dVol / \sqrt{26}$.

We simulate an overall rise in interest rates and a simultaneous flattening of the curve to capture an expected action from the Fed and the markets' anticipation of lower long-term inflation. We raise the 2 year rate by 20% and the 10 year rate by 10% and calibrate the other rates on the curve.

We tighten the credit spreads based on the magnitude of the equity increase as well as the current implied spread. The magnitude of tightening of the simulated credit spread is higher for larger equity rise and/or wider initial implied spread. To capture the equity sensitivity of the convertible securities, the magnitude of tightening for convertible securities is more than that of corporate bonds. We present the spread factors used for convertible securities ([Fig4](#)) and corporate bonds ([Fig5](#)) at the end of this document.

Takeout Stress:

We simulate a stock buy-out at a 20% premium in a 100% cash transaction, one month from today. For convertible securities that have takeout protection, we capture the additional payout in the valuation.

Since some indentures are ambiguous about when the takeout protection is triggered, we also simulate the takeout to be at parity without takeout protection as an additional scenario.

Fig1

		Bear Stress Spread Matrix ~ Convertibles																			
30dVol	Stk Move (%)	Implied Spread (bps)																			
		100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
10	-1.9612	1.020	1.020	1.020	1.062	1.101	1.133	1.161	1.184	1.205	1.224	1.241	1.256	1.270	1.284	1.296	1.307	1.318	1.328	1.338	1.347
15	-2.9417	1.030	1.030	1.030	1.072	1.112	1.145	1.173	1.196	1.218	1.236	1.253	1.269	1.283	1.297	1.309	1.320	1.331	1.342	1.351	1.360
20	-3.9223	1.041	1.041	1.041	1.083	1.124	1.157	1.184	1.209	1.230	1.249	1.266	1.282	1.296	1.310	1.322	1.334	1.345	1.355	1.365	1.374
25	-4.9029	1.052	1.052	1.052	1.094	1.135	1.169	1.197	1.221	1.243	1.262	1.279	1.295	1.310	1.323	1.336	1.348	1.359	1.369	1.379	1.388
30	-5.8835	1.063	1.063	1.063	1.106	1.147	1.181	1.209	1.234	1.256	1.275	1.293	1.309	1.323	1.337	1.350	1.362	1.373	1.384	1.393	1.403
35	-6.8641	1.074	1.074	1.074	1.118	1.159	1.193	1.222	1.247	1.269	1.288	1.306	1.322	1.337	1.351	1.364	1.376	1.387	1.398	1.408	1.418
40	-7.8446	1.085	1.085	1.085	1.129	1.171	1.206	1.235	1.260	1.282	1.302	1.320	1.337	1.352	1.366	1.379	1.391	1.402	1.413	1.423	1.433
45	-8.8252	1.097	1.097	1.097	1.142	1.184	1.219	1.248	1.274	1.296	1.316	1.334	1.351	1.366	1.380	1.393	1.406	1.417	1.428	1.438	1.448
50	-9.8058	1.109	1.109	1.109	1.154	1.197	1.232	1.262	1.287	1.310	1.330	1.349	1.366	1.381	1.395	1.409	1.421	1.433	1.444	1.454	1.464
55	-10.7864	1.121	1.121	1.121	1.167	1.210	1.246	1.276	1.302	1.325	1.345	1.364	1.381	1.396	1.411	1.424	1.437	1.448	1.460	1.470	1.480
60	-11.7670	1.133	1.133	1.133	1.180	1.224	1.259	1.290	1.316	1.339	1.360	1.379	1.396	1.412	1.426	1.440	1.453	1.465	1.476	1.486	1.497
65	-12.7475	1.146	1.146	1.146	1.193	1.237	1.274	1.304	1.331	1.354	1.375	1.394	1.412	1.428	1.442	1.456	1.469	1.481	1.492	1.503	1.513
70	-13.7281	1.159	1.159	1.159	1.206	1.251	1.288	1.319	1.346	1.370	1.391	1.410	1.428	1.444	1.459	1.473	1.486	1.498	1.509	1.520	1.531
75	-14.7087	1.172	1.172	1.172	1.220	1.266	1.303	1.334	1.361	1.385	1.407	1.426	1.444	1.460	1.475	1.490	1.503	1.515	1.527	1.538	1.548
80	-15.6893	1.186	1.186	1.186	1.235	1.280	1.318	1.350	1.377	1.402	1.423	1.443	1.461	1.477	1.493	1.507	1.520	1.533	1.544	1.556	1.566
85	-16.6699	1.200	1.200	1.200	1.249	1.296	1.334	1.366	1.394	1.418	1.440	1.460	1.478	1.495	1.510	1.525	1.538	1.551	1.563	1.574	1.585
90	-17.6505	1.214	1.214	1.214	1.264	1.311	1.349	1.382	1.410	1.435	1.457	1.477	1.496	1.513	1.528	1.543	1.556	1.569	1.581	1.593	1.603
95	-18.6310	1.229	1.229	1.229	1.279	1.327	1.366	1.399	1.427	1.452	1.475	1.495	1.514	1.531	1.547	1.561	1.575	1.588	1.600	1.612	1.623
100	-19.6116	1.244	1.244	1.244	1.295	1.343	1.382	1.416	1.445	1.470	1.493	1.513	1.532	1.549	1.565	1.580	1.594	1.607	1.620	1.631	1.643
105	-20.5922	1.259	1.259	1.259	1.311	1.360	1.399	1.433	1.462	1.488	1.511	1.532	1.551	1.569	1.585	1.600	1.614	1.627	1.640	1.652	1.663
110	-21.5728	1.275	1.275	1.275	1.327	1.377	1.417	1.451	1.481	1.507	1.530	1.551	1.570	1.588	1.605	1.620	1.634	1.648	1.660	1.672	1.684
115	-22.5534	1.291	1.291	1.291	1.344	1.394	1.435	1.469	1.499	1.526	1.549	1.571	1.590	1.608	1.625	1.640	1.655	1.668	1.681	1.693	1.705
120	-23.5339	1.308	1.308	1.308	1.361	1.412	1.453	1.488	1.519	1.545	1.569	1.591	1.611	1.629	1.646	1.661	1.676	1.690	1.703	1.715	1.727
125	-24.5145	1.325	1.325	1.325	1.379	1.430	1.472	1.508	1.538	1.565	1.590	1.612	1.632	1.650	1.667	1.683	1.698	1.712	1.725	1.737	1.749
130	-25.4951	1.342	1.342	1.342	1.397	1.449	1.492	1.527	1.559	1.586	1.611	1.633	1.653	1.672	1.689	1.705	1.720	1.734	1.748	1.760	1.772
135	-26.4757	1.360	1.360	1.360	1.416	1.468	1.511	1.548	1.579	1.607	1.632	1.655	1.675	1.694	1.712	1.728	1.743	1.757	1.771	1.784	1.796
140	-27.4563	1.378	1.378	1.378	1.435	1.488	1.532	1.569	1.601	1.629	1.654	1.677	1.698	1.717	1.735	1.751	1.767	1.781	1.795	1.808	1.820
145	-28.4368	1.397	1.397	1.397	1.454	1.509	1.553	1.590	1.623	1.651	1.677	1.700	1.721	1.741	1.759	1.775	1.791	1.806	1.820	1.833	1.845
150	-29.4174	1.417	1.417	1.417	1.475	1.530	1.574	1.612	1.645	1.674	1.700	1.724	1.745	1.765	1.783	1.800	1.816	1.831	1.845	1.858	1.871

Fig2

		Bear Stress Spread Matrix ~ Corporates																			
30dVol	Stk Move (%)	Spread (bps)																			
		100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
10	-1.3868	1.007	1.007	1.007	1.048	1.087	1.119	1.146	1.169	1.190	1.208	1.225	1.240	1.254	1.267	1.279	1.291	1.301	1.311	1.321	1.330
15	-2.0801	1.011	1.011	1.011	1.052	1.091	1.123	1.150	1.174	1.194	1.213	1.229	1.245	1.259	1.272	1.284	1.295	1.306	1.316	1.325	1.334
20	-2.7735	1.014	1.014	1.014	1.056	1.095	1.127	1.154	1.178	1.198	1.217	1.234	1.249	1.263	1.276	1.288	1.300	1.310	1.321	1.330	1.339
25	-3.4669	1.018	1.018	1.018	1.059	1.099	1.131	1.158	1.182	1.203	1.221	1.238	1.254	1.268	1.281	1.293	1.304	1.315	1.325	1.335	1.344
30	-4.1603	1.021	1.021	1.021	1.063	1.103	1.135	1.162	1.186	1.207	1.226	1.243	1.258	1.272	1.285	1.298	1.309	1.320	1.330	1.340	1.349
35	-4.8536	1.025	1.025	1.025	1.067	1.107	1.139	1.167	1.190	1.211	1.230	1.247	1.263	1.277	1.290	1.302	1.314	1.325	1.335	1.345	1.354
40	-5.5470	1.029	1.029	1.029	1.071	1.111	1.143	1.171	1.195	1.216	1.235	1.252	1.267	1.282	1.295	1.307	1.319	1.330	1.340	1.349	1.359
45	-6.2404	1.033	1.033	1.033	1.075	1.115	1.148	1.175	1.199	1.220	1.239	1.256	1.272	1.286	1.300	1.312	1.324	1.334	1.345	1.354	1.364
50	-6.9338	1.037	1.037	1.037	1.079	1.119	1.152	1.180	1.204	1.225	1.244	1.261	1.277	1.291	1.304	1.317	1.329	1.339	1.350	1.359	1.369
55	-7.6271	1.040	1.040	1.040	1.083	1.123	1.156	1.184	1.208	1.230	1.249	1.266	1.282	1.296	1.309	1.322	1.334	1.344	1.355	1.365	1.374
60	-8.3205	1.044	1.044	1.044	1.087	1.128	1.161	1.189	1.213	1.234	1.253	1.271	1.286	1.301	1.314	1.327	1.339	1.350	1.360	1.370	1.379
65	-9.0139	1.048	1.048	1.048	1.091	1.132	1.165	1.193	1.217	1.239	1.258	1.275	1.291	1.306	1.319	1.332	1.344	1.355	1.365	1.375	1.384
70	-9.7073	1.052	1.052	1.052	1.095	1.136	1.169	1.198	1.222	1.244	1.263	1.280	1.296	1.311	1.324	1.337	1.349	1.360	1.370	1.380	1.390
75	-10.4006	1.056	1.056	1.056	1.100	1.141	1.174	1.202	1.227	1.248	1.268	1.285	1.301	1.316	1.329	1.342	1.354	1.365	1.376	1.386	1.395
80	-11.0940	1.061	1.061	1.061	1.104	1.145	1.179	1.207	1.232	1.253	1.273	1.290	1.306	1.321	1.335	1.347	1.359	1.370	1.381	1.391	1.400
85	-11.7874	1.065	1.065	1.065	1.108	1.149	1.183	1.212	1.236	1.258	1.278	1.295	1.311	1.326	1.340	1.353	1.365	1.376	1.386	1.396	1.406
90	-12.4808	1.069	1.069	1.069	1.113	1.154	1.188	1.216	1.241	1.263	1.283	1.300	1.317	1.331	1.345	1.358	1.370	1.381	1.392	1.402	1.411
95	-13.1741	1.073	1.073	1.073	1.117	1.159	1.193	1.221	1.246	1.268	1.288	1.306	1.322	1.337	1.351	1.363	1.375	1.387	1.397	1.407	1.417
100	-13.8675	1.077	1.077	1.077	1.121	1.163	1.197	1.226	1.251	1.273	1.293	1.311	1.327	1.342	1.356	1.369	1.381	1.392	1.403	1.413	1.423
105	-14.5609	1.082	1.082	1.082	1.126	1.168	1.202	1.231	1.256	1.278	1.298	1.316	1.332	1.348	1.361	1.374	1.387	1.398	1.409	1.419	1.429
110	-15.2543	1.086	1.086	1.086	1.131	1.173	1.207	1.236	1.261	1.284	1.304	1.322	1.338	1.353	1.367	1.380	1.392	1.404	1.414	1.425	1.434
115	-15.9476	1.091	1.091	1.091	1.135	1.178	1.212	1.241	1.267	1.289	1.309	1.327	1.343	1.359	1.373	1.386	1.398	1.409	1.420	1.431	1.440
120	-16.6410	1.095	1.095	1.095	1.140	1.182	1.217	1.246	1.272	1.294	1.314	1.332	1.349	1.364	1.378	1.391	1.404	1.415	1.426	1.436	1.446
125	-17.3344	1.100	1.100																		

Fig3

		Credit Stress Spread Matrix																			
		Spread (bps)																			
30dVol		100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
10	1.003	1.003	1.003	1.044	1.083	1.115	1.142	1.165	1.186	1.204	1.221	1.236	1.250	1.263	1.275	1.286	1.297	1.307	1.316	1.325	
15	1.005	1.005	1.005	1.046	1.085	1.117	1.144	1.167	1.188	1.206	1.223	1.238	1.252	1.265	1.277	1.288	1.299	1.309	1.318	1.327	
20	1.007	1.007	1.007	1.048	1.087	1.119	1.146	1.169	1.190	1.208	1.225	1.240	1.254	1.267	1.279	1.291	1.301	1.311	1.321	1.330	
25	1.009	1.009	1.009	1.050	1.089	1.121	1.148	1.172	1.192	1.211	1.227	1.243	1.257	1.270	1.282	1.293	1.304	1.314	1.323	1.332	
30	1.011	1.011	1.011	1.052	1.091	1.123	1.150	1.174	1.194	1.213	1.230	1.245	1.259	1.272	1.284	1.295	1.306	1.316	1.326	1.335	
35	1.013	1.013	1.013	1.054	1.093	1.125	1.152	1.176	1.196	1.215	1.232	1.247	1.261	1.274	1.286	1.298	1.308	1.318	1.328	1.337	
40	1.014	1.014	1.014	1.056	1.095	1.127	1.154	1.178	1.199	1.217	1.234	1.249	1.263	1.277	1.289	1.300	1.311	1.321	1.330	1.339	
45	1.016	1.016	1.016	1.058	1.097	1.129	1.157	1.180	1.201	1.219	1.236	1.252	1.266	1.279	1.291	1.302	1.313	1.323	1.333	1.342	
50	1.018	1.018	1.018	1.060	1.099	1.131	1.159	1.182	1.203	1.222	1.239	1.254	1.268	1.281	1.293	1.305	1.316	1.326	1.335	1.344	
55	1.020	1.020	1.020	1.062	1.101	1.134	1.161	1.184	1.205	1.224	1.241	1.256	1.271	1.284	1.296	1.307	1.318	1.328	1.338	1.347	
60	1.022	1.022	1.022	1.064	1.103	1.136	1.163	1.187	1.208	1.226	1.243	1.259	1.273	1.286	1.298	1.310	1.321	1.331	1.340	1.349	
65	1.024	1.024	1.024	1.066	1.105	1.138	1.165	1.189	1.210	1.229	1.246	1.261	1.275	1.289	1.301	1.312	1.323	1.333	1.343	1.352	
70	1.026	1.026	1.026	1.068	1.108	1.140	1.167	1.191	1.212	1.231	1.248	1.264	1.278	1.291	1.303	1.315	1.326	1.336	1.345	1.355	
75	1.028	1.028	1.028	1.070	1.110	1.142	1.170	1.194	1.215	1.233	1.250	1.266	1.280	1.293	1.306	1.317	1.328	1.338	1.348	1.357	
80	1.030	1.030	1.030	1.072	1.112	1.144	1.172	1.196	1.217	1.236	1.253	1.268	1.283	1.296	1.308	1.320	1.331	1.341	1.351	1.360	
85	1.032	1.032	1.032	1.074	1.114	1.147	1.174	1.198	1.219	1.238	1.255	1.271	1.285	1.299	1.311	1.322	1.333	1.344	1.353	1.362	
90	1.034	1.034	1.034	1.076	1.116	1.149	1.177	1.201	1.222	1.241	1.258	1.273	1.288	1.301	1.313	1.325	1.336	1.346	1.356	1.365	
95	1.036	1.036	1.036	1.078	1.118	1.151	1.179	1.203	1.224	1.243	1.260	1.276	1.290	1.304	1.316	1.328	1.339	1.349	1.359	1.368	
100	1.038	1.038	1.038	1.080	1.121	1.154	1.181	1.205	1.227	1.246	1.263	1.279	1.293	1.306	1.319	1.330	1.341	1.352	1.361	1.371	
105	1.040	1.040	1.040	1.083	1.123	1.156	1.184	1.208	1.229	1.248	1.265	1.281	1.296	1.309	1.321	1.333	1.344	1.354	1.364	1.373	
110	1.042	1.042	1.042	1.085	1.125	1.158	1.186	1.210	1.232	1.251	1.268	1.284	1.298	1.312	1.324	1.336	1.347	1.357	1.367	1.376	
115	1.044	1.044	1.044	1.087	1.128	1.161	1.189	1.213	1.234	1.253	1.271	1.286	1.301	1.314	1.327	1.339	1.350	1.360	1.370	1.379	
120	1.047	1.047	1.047	1.089	1.130	1.163	1.191	1.215	1.237	1.256	1.273	1.289	1.304	1.317	1.330	1.341	1.352	1.363	1.373	1.382	
125	1.049	1.049	1.049	1.092	1.132	1.165	1.194	1.218	1.239	1.258	1.276	1.292	1.306	1.320	1.332	1.344	1.355	1.366	1.375	1.385	
130	1.051	1.051	1.051	1.094	1.135	1.168	1.196	1.220	1.242	1.261	1.279	1.294	1.309	1.323	1.335	1.347	1.358	1.368	1.378	1.388	
135	1.053	1.053	1.053	1.096	1.137	1.170	1.199	1.223	1.245	1.264	1.281	1.297	1.312	1.325	1.338	1.350	1.361	1.371	1.381	1.391	
140	1.055	1.055	1.055	1.099	1.139	1.173	1.201	1.226	1.247	1.267	1.284	1.300	1.315	1.328	1.341	1.353	1.364	1.374	1.384	1.394	
145	1.058	1.058	1.058	1.101	1.142	1.175	1.204	1.228	1.250	1.269	1.287	1.303	1.317	1.331	1.344	1.356	1.367	1.377	1.387	1.397	
150	1.060	1.060	1.060	1.103	1.144	1.178	1.206	1.231	1.253	1.272	1.290	1.306	1.320	1.334	1.347	1.359	1.370	1.380	1.390	1.400	

Fig4

		Bull Stress Spread Matrix ~ Convertibles																			
		Implied Spread (bps)																			
30dVol	Stk Move (%)	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
10	1.3868	0.993	0.993	0.993	0.954	0.920	0.894	0.873	0.855	0.840	0.828	0.816	0.806	0.797	0.789	0.782	0.775	0.769	0.763	0.757	0.752
15	2.0801	0.990	0.990	0.990	0.951	0.917	0.891	0.870	0.852	0.838	0.825	0.814	0.804	0.795	0.786	0.779	0.772	0.766	0.760	0.755	0.750
20	2.7735	0.986	0.986	0.986	0.948	0.914	0.888	0.867	0.849	0.835	0.822	0.811	0.801	0.792	0.784	0.776	0.770	0.763	0.758	0.752	0.747
25	3.4669	0.983	0.983	0.983	0.945	0.911	0.885	0.864	0.847	0.832	0.819	0.808	0.798	0.789	0.781	0.774	0.767	0.761	0.755	0.750	0.745
30	4.1603	0.980	0.980	0.980	0.941	0.908	0.882	0.861	0.844	0.829	0.817	0.805	0.796	0.787	0.779	0.771	0.765	0.758	0.752	0.747	0.742
35	4.8536	0.977	0.977	0.977	0.938	0.905	0.879	0.858	0.841	0.826	0.814	0.803	0.793	0.784	0.776	0.769	0.762	0.756	0.750	0.745	0.740
40	5.5470	0.973	0.973	0.973	0.935	0.902	0.876	0.855	0.838	0.824	0.811	0.800	0.790	0.781	0.773	0.766	0.759	0.753	0.748	0.742	0.737
45	6.2404	0.970	0.970	0.970	0.932	0.899	0.873	0.853	0.835	0.821	0.808	0.797	0.788	0.779	0.771	0.764	0.757	0.751	0.745	0.740	0.735
50	6.9338	0.967	0.967	0.967	0.929	0.896	0.870	0.850	0.833	0.818	0.806	0.795	0.785	0.776	0.768	0.761	0.755	0.748	0.743	0.737	0.732
55	7.6271	0.964	0.964	0.964	0.926	0.893	0.867	0.847	0.830	0.816	0.803	0.792	0.783	0.774	0.766	0.759	0.752	0.746	0.740	0.735	0.730
60	8.3205	0.961	0.961	0.961	0.923	0.890	0.865	0.844	0.827	0.813	0.801	0.790	0.780	0.771	0.763	0.756	0.750	0.744	0.738	0.733	0.728
65	9.0139	0.958	0.958	0.958	0.920	0.887	0.862	0.842	0.825	0.810	0.798	0.787	0.778	0.769	0.761	0.754	0.747	0.741	0.736	0.730	0.725
70	9.7073	0.955	0.955	0.955	0.917	0.884	0.859	0.839	0.822	0.808	0.796	0.785	0.775	0.766	0.759	0.752	0.745	0.739	0.733	0.728	0.723
75	10.4006	0.952	0.952	0.952	0.914	0.882	0.856	0.836	0.820	0.805	0.793	0.782	0.773	0.764	0.756	0.749	0.743	0.737	0.731	0.726	0.721
80	11.0940	0.949	0.949	0.949	0.912	0.879	0.854	0.834	0.817	0.803	0.791	0.780	0.770	0.762	0.754	0.747	0.740	0.734	0.729	0.723	0.719
85	11.7874	0.946	0.946	0.946	0.909	0.876	0.851	0.831	0.814	0.800	0.788	0.777	0.768	0.759	0.752	0.744	0.738	0.732	0.726	0.721	0.716
90	12.4808	0.943	0.943	0.943	0.906	0.873	0.848	0.829	0.812	0.798	0.786	0.775	0.766	0.757	0.749	0.742	0.736	0.730	0.724	0.719	0.714
95	13.1741	0.940	0.940	0.940	0.903	0.871	0.846	0.826	0.809	0.795	0.783	0.773	0.763	0.755	0.747	0.740	0.733	0.727	0.722	0.717	0.712
100	13.8675	0.937	0.937	0.937	0.900	0.868	0.843	0.823	0.807	0.793	0.781	0.770	0.761	0.752	0.745	0.738	0.731	0.725	0.720	0.715	0.710
105	14.5609	0.934	0.934	0.934	0.898	0.865	0.841	0.821	0.805	0.791	0.779	0.768	0.759	0.750	0.742	0.735	0.729	0.723	0.718	0.712	0.708
110	15.2543	0.931	0.931	0.931	0.895	0.863	0.838	0.818	0.802	0.788	0.776	0.766	0.756	0.748	0.740	0.733	0.727	0.721	0.715	0.710	0.705
115	15.9476	0.929	0.929	0.929	0.892	0.860	0.836	0.816	0.800	0.786	0.774	0.763	0.754	0.746	0.738	0.731	0.725	0.719	0.713	0.708	0.703
120	16.6410	0.926	0.926	0.926	0.890	0.858	0.833	0.814	0.797	0.784	0.772	0.761	0.752	0.743	0.736	0.729	0.722	0.717	0.711	0.706	0.701
125	17.3344	0.923	0.923	0.923	0.887	0.855	0.831	0.811	0.795	0.781	0.769	0.759	0.750	0.741	0.734	0.727	0.720	0.714	0.709	0.704	0.699
130	18.0278	0.920	0.920	0.920	0.884	0.853	0.828	0.809	0.793	0.779	0.767	0.757	0.747	0.739	0.						

Fig5

		Bull Stress Spread Matrix ~ Corporates																			
		Spread (bps)																			
30dVol	Stk Move (%)	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
10	1.3868	0.997	0.997	0.997	0.957	0.923	0.897	0.876	0.858	0.843	0.830	0.819	0.809	0.800	0.792	0.784	0.778	0.771	0.765	0.760	0.755
15	2.0801	0.995	0.995	0.995	0.956	0.922	0.895	0.874	0.857	0.842	0.829	0.818	0.808	0.799	0.791	0.783	0.776	0.770	0.764	0.759	0.753
20	2.7735	0.993	0.993	0.993	0.954	0.920	0.894	0.873	0.855	0.840	0.828	0.816	0.806	0.797	0.789	0.782	0.775	0.769	0.763	0.757	0.752
25	3.4669	0.992	0.992	0.992	0.953	0.918	0.892	0.871	0.854	0.839	0.826	0.815	0.805	0.796	0.788	0.780	0.774	0.767	0.761	0.756	0.751
30	4.1603	0.990	0.990	0.990	0.951	0.917	0.891	0.870	0.852	0.838	0.825	0.814	0.804	0.795	0.787	0.779	0.772	0.766	0.760	0.755	0.750
35	4.8536	0.988	0.988	0.988	0.949	0.915	0.889	0.868	0.851	0.836	0.824	0.812	0.802	0.793	0.785	0.778	0.771	0.765	0.759	0.754	0.748
40	5.5470	0.987	0.987	0.987	0.948	0.914	0.888	0.867	0.850	0.835	0.822	0.811	0.801	0.792	0.784	0.777	0.770	0.764	0.758	0.752	0.747
45	6.2404	0.985	0.985	0.985	0.946	0.912	0.886	0.866	0.848	0.834	0.821	0.810	0.800	0.791	0.783	0.775	0.769	0.762	0.756	0.751	0.746
50	6.9338	0.983	0.983	0.983	0.945	0.911	0.885	0.864	0.847	0.832	0.819	0.808	0.798	0.789	0.781	0.774	0.767	0.761	0.755	0.750	0.745
55	7.6271	0.982	0.982	0.982	0.943	0.909	0.883	0.863	0.845	0.831	0.818	0.807	0.797	0.788	0.780	0.773	0.766	0.760	0.754	0.749	0.744
60	8.3205	0.980	0.980	0.980	0.942	0.908	0.882	0.861	0.844	0.829	0.817	0.806	0.796	0.787	0.779	0.772	0.765	0.759	0.753	0.747	0.742
65	9.0139	0.979	0.979	0.979	0.940	0.907	0.881	0.860	0.843	0.828	0.816	0.804	0.795	0.786	0.778	0.770	0.764	0.757	0.752	0.746	0.741
70	9.7073	0.977	0.977	0.977	0.939	0.905	0.879	0.859	0.841	0.827	0.814	0.803	0.793	0.784	0.776	0.769	0.762	0.756	0.750	0.745	0.740
75	10.4006	0.976	0.976	0.976	0.937	0.904	0.878	0.857	0.840	0.826	0.813	0.802	0.792	0.783	0.775	0.768	0.761	0.755	0.749	0.744	0.739
80	11.0940	0.974	0.974	0.974	0.936	0.902	0.877	0.856	0.839	0.824	0.812	0.801	0.791	0.782	0.774	0.767	0.760	0.754	0.748	0.743	0.738
85	11.7874	0.973	0.973	0.973	0.934	0.901	0.875	0.855	0.837	0.823	0.810	0.799	0.790	0.781	0.773	0.766	0.759	0.753	0.747	0.742	0.737
90	12.4808	0.971	0.971	0.971	0.933	0.899	0.874	0.853	0.836	0.822	0.809	0.798	0.788	0.780	0.772	0.764	0.758	0.751	0.746	0.740	0.735
95	13.1741	0.970	0.970	0.970	0.932	0.898	0.872	0.852	0.835	0.820	0.808	0.797	0.787	0.778	0.770	0.763	0.756	0.750	0.745	0.739	0.734
100	13.8675	0.968	0.968	0.968	0.930	0.897	0.871	0.851	0.834	0.819	0.807	0.796	0.786	0.777	0.769	0.762	0.755	0.749	0.743	0.738	0.733
105	14.5609	0.967	0.967	0.967	0.929	0.895	0.870	0.849	0.832	0.818	0.805	0.795	0.785	0.776	0.768	0.761	0.754	0.748	0.742	0.737	0.732
110	15.2543	0.965	0.965	0.965	0.927	0.894	0.869	0.848	0.831	0.817	0.804	0.793	0.784	0.775	0.767	0.760	0.753	0.747	0.741	0.736	0.731
115	15.9476	0.964	0.964	0.964	0.926	0.893	0.867	0.847	0.830	0.816	0.803	0.792	0.782	0.774	0.766	0.759	0.752	0.746	0.740	0.735	0.730
120	16.6410	0.962	0.962	0.962	0.925	0.891	0.866	0.846	0.829	0.814	0.802	0.791	0.781	0.773	0.765	0.757	0.751	0.745	0.739	0.734	0.729
125	17.3344	0.961	0.961	0.961	0.923	0.890	0.865	0.844	0.827	0.813	0.801	0.790	0.780	0.771	0.763	0.756	0.750	0.744	0.738	0.733	0.728
130	18.0278	0.959	0.959	0.959	0.922	0.889	0.863	0.843	0.826	0.812	0.800	0.789	0.779	0.770	0.762	0.755	0.749	0.742	0.737	0.732	0.727
135	18.7211	0.958	0.958	0.958	0.920	0.887	0.862	0.842	0.825	0.811	0.798	0.787	0.778	0.769	0.761	0.754	0.747	0.741	0.736	0.730	0.726
140	19.4145	0.957	0.957	0.957	0.919	0.886	0.861	0.841	0.824	0.810	0.797	0.786	0.777	0.768	0.760	0.753	0.746	0.740	0.735	0.729	0.724
145	20.1079	0.955	0.955	0.955	0.918	0.885	0.860	0.839	0.823	0.808	0.796	0.785	0.776	0.767	0.759	0.752	0.745	0.739	0.734	0.728	0.723
150	20.8013	0.954	0.954	0.954	0.916	0.884	0.858	0.838	0.821	0.807	0.795	0.784	0.774	0.766	0.758	0.751	0.744	0.738	0.733	0.727	0.722