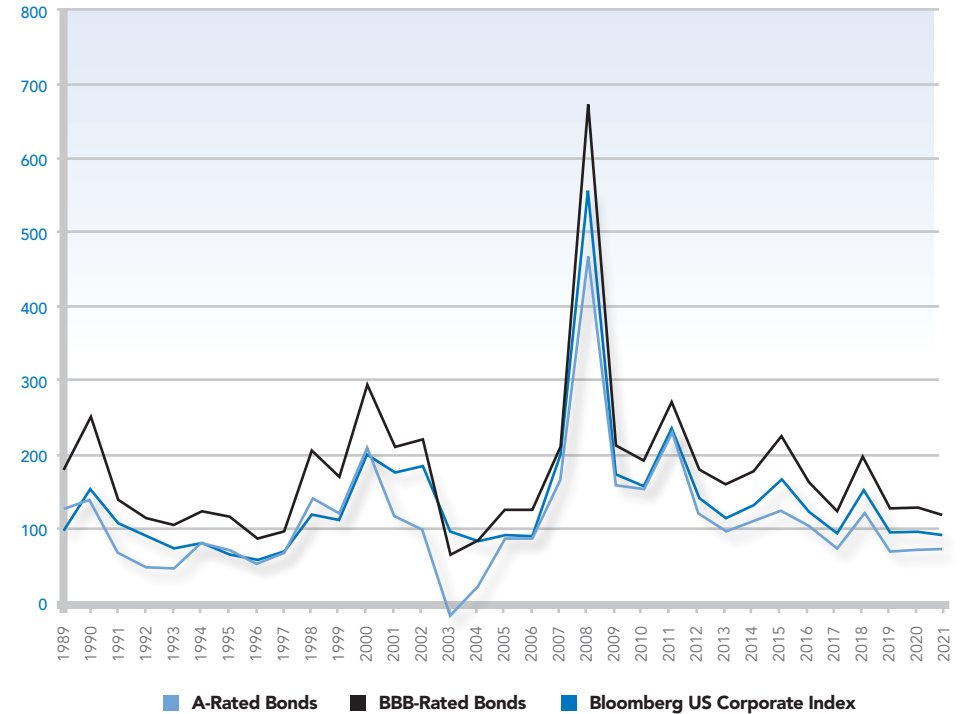


HISTORICAL INTEREST RATES & CREDIT SPREADS

10 Yr U.S. Treasury Note	A-Rated Bonds		BBB-Rated Bonds		Bbg US Corporate Index		
Month - Year	Yield to Maturity	Yield*	Spread	Yield*	Spread	Yield*	Spread
31-Dec-89	7.92	9.16	124	9.71	179	8.89	97
31-Dec-90	8.07	9.46	139	10.56	249	9.58	151
31-Dec-91	6.07	6.74	67	7.45	138	7.14	107
31-Dec-92	6.69	7.16	47	7.81	112	7.57	88
31-Dec-93	5.79	6.26	47	6.83	104	6.52	73
31-Dec-94	7.83	8.61	78	9.05	122	8.61	78
31-Dec-95	5.58	6.27	69	6.73	115	6.23	65
31-Dec-96	6.42	6.93	51	7.27	85	6.98	56
31-Dec-97	5.85	6.51	66	6.79	94	6.52	67
31-Dec-98	4.66	6.04	138	6.70	204	5.84	118
31-Dec-99	6.44	7.65	121	8.12	168	7.55	111
31-Dec-00	5.12	7.21	209	8.06	294	7.11	199
31-Dec-01	5.04	6.20	116	7.14	210	6.78	174
31-Dec-02	3.83	4.79	96	6.04	221	5.67	184
31-Dec-03	4.32	4.15	-17	4.95	63	5.27	95
31-Dec-04	4.22	4.43	21	5.05	83	5.03	81
31-Dec-05	4.39	5.25	86	5.63	124	5.29	90
31-Dec-06	4.70	5.56	86	5.94	124	5.58	88
31-Dec-07	4.03	5.69	166	6.13	210	6.01	198
31-Dec-08	2.25	6.92	467	8.98	673	7.80	555
31-Dec-09	3.84	5.40	156	5.96	212	5.56	172
31-Dec-10	3.29	4.80	151	5.20	191	4.85	156
31-Dec-11	1.68	3.97	229	4.39	271	4.02	234
31-Dec-12	1.76	2.95	119	3.56	180	3.17	141
31-Dec-13	3.03	3.98	95	4.61	158	4.17	114
31-Dec-14	2.17	3.26	109	3.95	178	3.48	131
31-Dec-15	2.27	3.49	122	4.51	224	3.92	165
31-Dec-16	2.45	3.46	101	4.05	160	3.68	123
31-Dec-17	2.41	3.14	73	3.65	124	3.34	93
31-Dec-18	2.69	3.87	118	4.66	197	4.22	153
31-Dec-19	1.92	2.62	70	3.12	120	2.85	93
31-Dec-20	0.92	1.65	73	2.13	121	1.88	96
31-Jan-21	1.07	1.82	75	2.28	121	2.04	97
28-Feb-21	1.41	2.10	69	2.54	113	2.31	90
31-Mar-21	1.74	2.45	71	2.86	112	2.65	91
30-Apr-21	1.63	2.32	69	2.72	109	2.51	88
31-May-21	1.60	2.25	65	2.64	104	2.44	84
30-Jun-21	1.47	2.10	63	2.47	100	2.27	80
31-Jul-21	1.22	1.90	68	2.27	105	2.08	86
31-Aug-21	1.31	2.00	69	2.38	107	2.18	87
30-Sep-21	1.49	2.16	67	2.53	104	2.33	84
31-Oct-21	1.56	2.26	70	2.62	106	2.43	87
30-Nov-21	1.45	2.25	80	2.66	121	2.44	99
31-Dec-21	1.51	2.25	74	2.64	113	2.43	92

Source: Barclays Capital 01/03/21. For Financial Professional Use *Represents an approximation.

CREDIT SPREADS TO TREASURIES | YEARS ENDED DECEMBER 31



Averages	A-Rated Bonds	BBB-Rated Bonds	US Corporate Index
	Period ended December 31, 2021		
2 years	0.90	1.49	1.17
5 years	0.82	1.35	1.05
10 years	0.95	1.58	1.20
20 years	1.20	1.87	1.53

KEY OBSERVATIONS

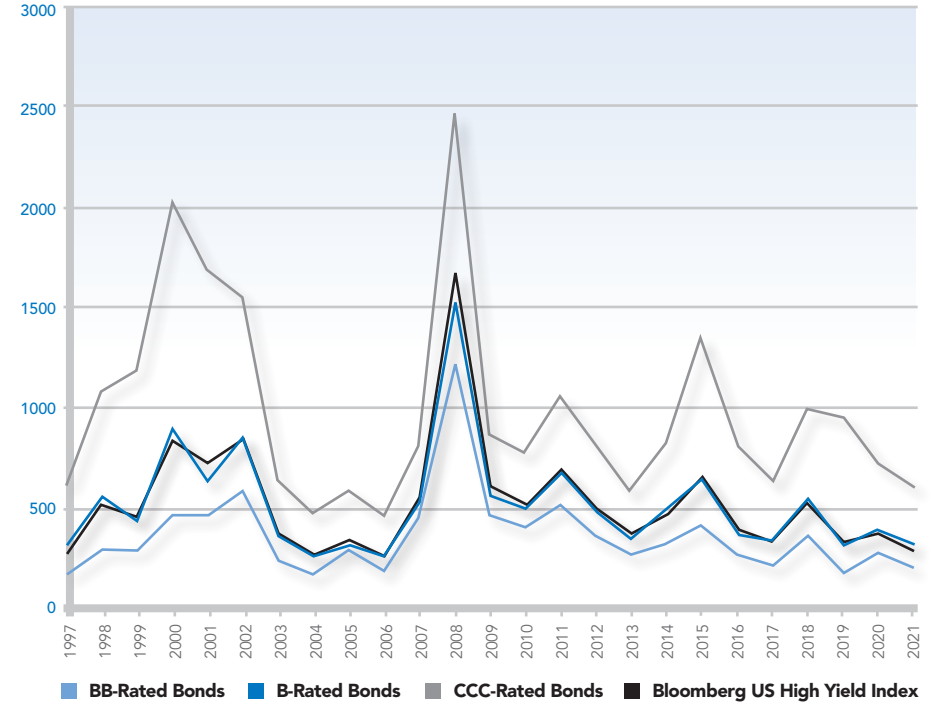
For the month of December 2021, the yield on the 10-year US Treasury Note ended at 1.51%, 6 basis points higher from the previous month. The Bloomberg Barclays US Corporate Index tightened by 7 basis points to 0.92% over Treasuries. The A Rated Corporate Credit Spread decreased by 6 basis points to 0.74%. The BBB Rated Corporate Credit Spread decreased by 8 basis points to 1.13%.

HISTORICAL INTEREST RATES & CREDIT SPREADS

Month - Year	5 Yr U.S. Treasury Note	BB-Rated Bonds		B-Rated Bonds		CCC-Rated Bonds		Bbg US High Yield Index	
	Yield to Maturity	Yield*	Spread	Yield*	Spread	Yield*	Spread	Yield*	Spread
31-Dec-97	5.71	7.39	168	8.97	326	11.88	617	8.59	288
31-Dec-98	4.56	7.50	294	10.15	559	15.38	1082	9.83	527
31-Dec-99	6.36	9.20	284	10.84	448	18.22	1186	11.03	467
31-Dec-00	4.99	9.64	465	13.99	900	25.25	2026	13.47	848
31-Dec-01	4.38	8.87	449	10.80	642	21.30	1692	11.66	728
31-Dec-02	2.78	8.60	582	11.37	859	18.30	1552	11.29	851
31-Dec-03	3.25	5.64	239	6.96	371	9.65	640	7.18	393
31-Dec-04	3.63	5.42	179	6.30	267	8.38	475	6.50	287
31-Dec-05	4.35	7.27	292	7.61	326	10.23	588	7.91	356
31-Dec-06	4.70	6.53	183	7.39	269	9.28	458	7.44	274
31-Dec-07	3.45	7.95	450	8.81	536	11.55	810	9.14	569
31-Dec-08	1.55	13.66	1211	16.75	1520	26.21	2466	18.17	1662
31-Dec-09	2.69	7.22	453	8.36	567	11.37	868	8.85	616
31-Dec-10	2.01	6.00	399	7.07	506	9.76	775	7.27	526
31-Dec-11	0.83	5.95	512	7.65	682	11.39	1056	7.82	699
31-Dec-12	0.72	4.31	359	5.58	486	8.84	812	5.83	511
31-Dec-13	1.75	4.44	269	5.39	364	7.66	591	5.57	382
31-Dec-14	1.65	4.89	324	6.67	502	9.85	820	6.48	483
31-Dec-15	1.76	5.93	417	8.30	654	15.27	1351	8.36	660
31-Dec-16	1.93	4.63	270	5.75	382	10.00	807	6.02	409
31-Dec-17	2.21	4.32	211	5.64	343	8.36	615	5.64	343
31-Dec-18	2.51	6.05	354	7.82	531	12.40	989	7.77	526
31-Dec-19	1.69	3.51	182	4.93	324	10.89	920	5.05	336
31-Dec-20	0.36	3.00	264	4.15	379	7.51	715	3.96	360
31-Jan-21	0.42	3.07	265	4.33	391	7.10	668	4.04	362
28-Feb-21	0.73	3.15	242	4.26	353	6.62	589	3.99	326
31-Mar-21	0.94	3.21	227	4.28	334	6.80	586	4.04	310
30-Apr-21	0.85	2.99	214	4.05	320	6.19	534	3.76	291
31-May-21	0.80	3.06	226	4.01	321	6.06	526	3.76	296
30-Jun-21	0.89	2.89	200	3.83	294	5.80	491	3.57	268
31-Jul-21	0.69	2.83	214	4.04	335	6.08	539	3.63	294
31-Aug-21	0.78	2.81	203	4.05	327	6.34	556	3.66	288
30-Sep-21	0.97	3.00	203	4.24	327	6.62	565	3.86	289
31-Oct-21	1.19	3.21	202	4.41	322	6.86	567	4.06	287
30-Nov-21	1.16	3.57	241	4.90	374	7.70	654	4.53	337
31-Dec-21	1.26	3.20	194	4.39	313	7.22	596	4.09	283

Source: Barclays Capital 01/03/21. For Financial Professional Use *Represents an approximation.

CREDIT SPREADS TO TREASURIES | YEARS ENDED DECEMBER 31



Averages	BB	B	CCC	BbgBc US HY Credit Index
	Period ended December 31, 2021			
2 years	3.03	4.43	8.77	4.24
5 years	2.41	3.78	7.67	3.70
10 years	2.84	4.28	8.22	4.29
15 years	3.91	5.39	9.46	5.58
20 years	3.67	5.09	8.95	5.26

KEY OBSERVATIONS

For the month of December 2021, the yield on the 5-year US Treasury Note ended at 1.26%, 10 basis points higher from the previous month. The Bloomberg Barclays US High Yield Index tightened by 54 basis points to 2.83% over Treasuries. The BB Rated Corporate Credit Spread decreased by 47 basis points to 1.94%. The B Rated Corporate Credit Spread tightened by 61 basis points to 3.13%. The CCC Rated Corporate Credit Spread decreased by 58 basis points to 5.96%.