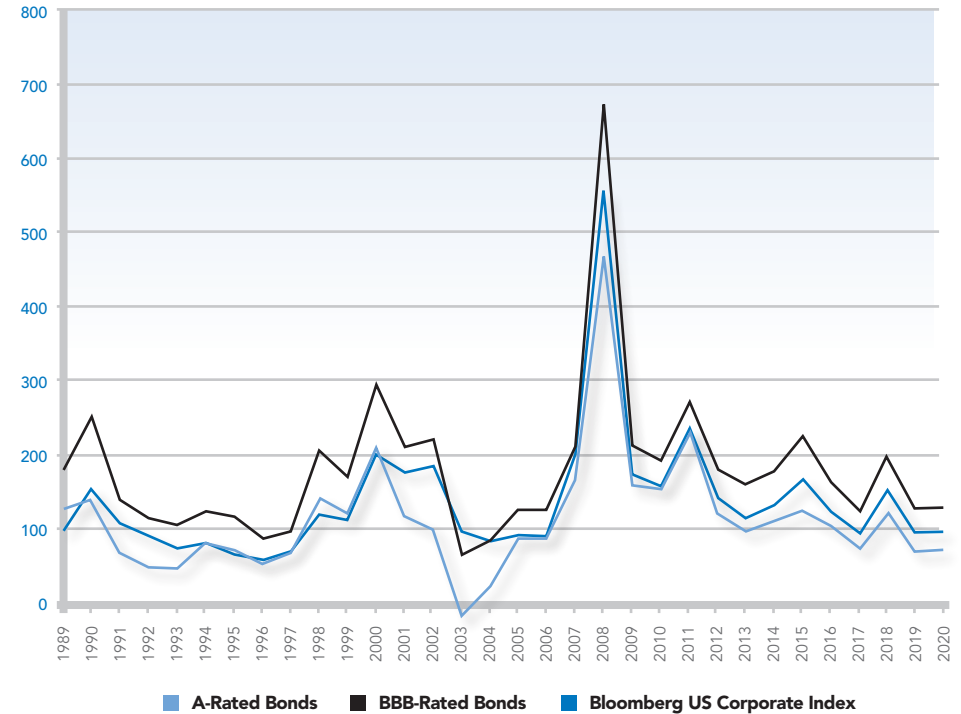


## HISTORICAL INTEREST RATES & CREDIT SPREADS

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-Mar-20	0.67	2.78	211	4.20	353	3.39	272
30-Jun-20	0.66	1.79	113	2.60	194	2.16	150
30-Sep-20	0.69	1.73	104	2.42	173	2.05	136
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

Source: Barclays Capital 11/01/21. 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
<b>Period ended October 31, 2021</b>			
2 years	0.90	1.49	1.17
<b>Period ended December 31, 2020</b>			
5 years	0.87	1.44	1.12
10 years	1.11	1.73	1.34
20 years	1.22	1.92	1.57

## KEY OBSERVATIONS

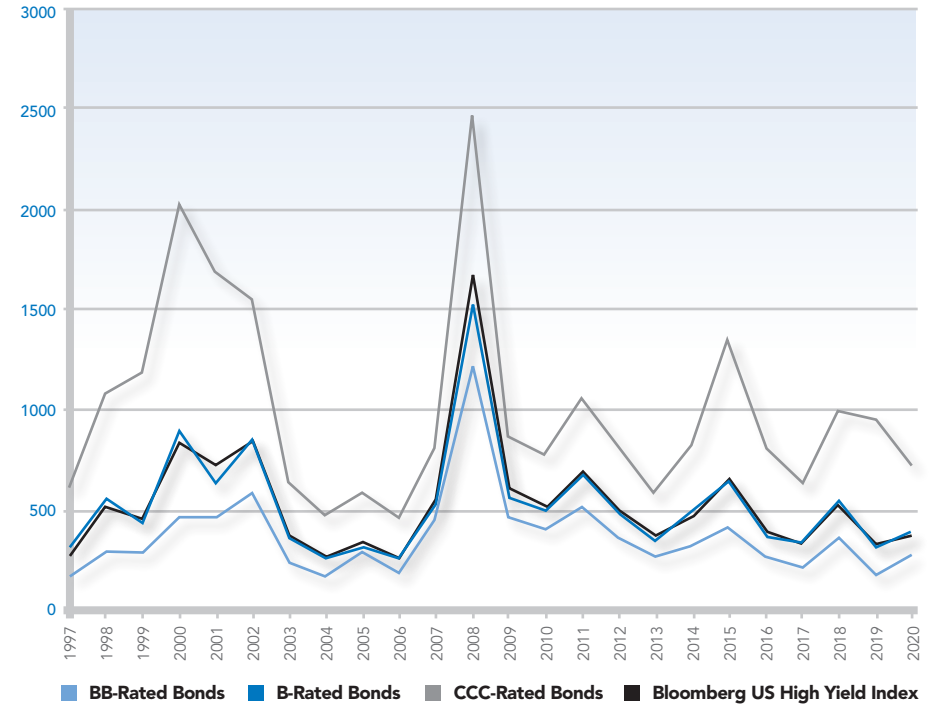
For the month of October 2021, the yield on the 10-year US Treasury Note ended at 1.56%, 7 basis points higher from the previous month. The Bloomberg US Corporate Index widened by 3 basis points to 0.87% over Treasuries. The A Rated Corporate Credit Spread increased by 3 basis points to 0.70%. The BBB Rated Corporate Credit Spread increased by 2 basis points to 1.06%.

## 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-Mar-20	0.38	6.92	654	8.94	856	18.90	1852	9.18	880
30-Jun-20	0.29	4.85	456	6.72	643	13.37	1308	6.55	626
30-Sep-20	0.28	4.10	382	5.68	540	10.68	1040	5.45	517
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

Source: Barclays Capital 11/01/21. For Financial Professional Use \*Represents an approximation.

## CREDIT SPREADS TO TREASURIES | YEARS ENDED DECEMBER 31



Averages	BB	B	CCC	Bbg US HY Credit Index
Period ended October 31, 2021				
2 years	3.00	4.43	9.06	4.27
Period ended December 31, 2020				
5 years	2.56	3.92	8.09	3.95
10 years	3.16	4.65	8.68	4.71
15 years	3.91	5.36	9.37	5.57

## KEY OBSERVATIONS

For the month of October 2021, the yield on the 5-year US Treasury Note ended at 1.19%, 22 basis points higher from the previous month. The Bloomberg US High Yield Index tightened by 2 basis points to 2.87% over Treasuries. The BB Rated Corporate Credit Spread decreased by 1 basis point to 2.02%. The B Rated Corporate Credit Spread tightened by 5 basis points to 3.22%. The CCC Rated Corporate Credit Spread increased by 2 basis points to 5.67%.