Market Briefing

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Subject: Mid-Year Recap and U.S. Insurance Industry Invested Assets as of Year-End 2022

Introduction

We have just passed the mid-year mark for 2023. Compared to year-end 2022, the 30-year Treasury is yielding one basis point higher, while the 10-year is up nine basis points, and the 1-year is up 71 basis points. The Treasury yield curve is inverted (short-term yields are higher than long-term yields) by 162 basis points, as compared with year-end 2022 when the degree of inversion was 89 basis points. Through the first half of 2023, the S&P 500 index is up 15.9%. This is after being down 19.4% for the full-year 2022. Oil prices, as represented by the benchmark West Texas Intermediate, are down 12.4%. Overall, market volatility increased in the spring with the failure of several banks, though it has settled back down somewhat as of late. Before going into greater detail on market activity, it is useful to remind ourselves of U.S. insurance company invested assets.

[The data for insurance company investments was all based on Financial Statement Data submitted to the NAIC and acquired via SNL, which is a unit of S&P Global. Market data was acquired via the Federal Reserve Bank of St. Louis.]

U.S. Insurer Invested Assets

($ in 000s)	Insurance Industry		Life Insurers		P&C Insurers		Health Insurers	
	2021	2022	2021	2022	2021	2022	2021	2022
SHORT TERM INVESTMENTS								
ST Investments & Cash Equivalents	290,837,436	307,428,380	114,875,654	119,102,959	137,986,621	137,879,596	37,975,160	50,445,825
LONG TERM INVESTMENTS								
Corporate Bonds	2,627,809,843	2,686,993,923	2,112,851,313	2,140,868,179	442,369,216	468,856,533	72,589,313	77,269,212
Bank Loans	89,404,313	107,746,655	67,890,982	88,663,413	19,282,188	16,905,130	2,231,144	2,178,111
Government Bonds (incl Municipals)	878,369,765	873,980,038	404,311,781	392,516,263	425,482,628	432,346,766	48,575,357	49,117,009
Agency CMBS	74,600,359	68,140,589	44,499,656	39,234,299	28,177,544	27,067,571	1,923,159	1,838,719
Agency RMBS	234,056,795	228,473,646	126,447,514	108,820,187	85,750,177	93,807,323	21,859,104	25,846,136
Agency ABS	22,124,461	22,366,565	13,385,718	13,410,359	8,097,352	8,286,816	641,390	669,390
Non-Agency CMBS	209,004,196	211,642,748	151,446,609	155,725,368	48,249,244	45,861,595	9,308,344	10,055,785
Non-Agency RMBS	93,358,039	101,345,086	71,050,404	76,100,280	19,276,256	21,863,980	3,031,379	3,380,826
Non-Agency ABS	470,593,353	501,939,115	363,347,707	390,908,569	91,254,566	93,336,252	15,991,081	17,694,294
Hybrids	20,621,925	21,815,571	14,984,432	16,435,418	4,978,972	4,805,193	658,521	574,959
SVO Funds	14,060,821	11,543,762	3,184,534	3,933,230	6,598,133	4,756,329	4,278,154	2,854,203
Subtotal Unaffiliated Bonds	**4,734,003,870**	**4,835,987,696**	**3,373,400,650**	**3,426,615,564**	**1,179,516,275**	**1,217,893,488**	**181,086,945**	**191,478,644**
Preferred Stock	35,205,853	31,724,341	18,231,916	15,232,707	15,962,729	15,716,683	1,011,209	774,951
Common Stock	560,380,576	500,779,248	41,000,311	33,664,114	508,942,765	458,379,799	10,437,501	8,735,334
Funds reported as Common Stock	59,753,640	38,064,878	6,820,559	4,394,999	35,214,422	19,501,828	17,718,660	14,168,051
Subtotal Unaffiliated Equity	**655,340,070**	**570,568,467**	**66,052,785**	**53,291,820**	**560,119,916**	**493,598,311**	**29,167,369**	**23,678,336**
Commercial Mortgage Loans	571,440,221	609,114,888	547,324,164	582,499,083	23,793,542	26,144,776	322,515	471,029
Mezzanine Loans	10,264,068	11,739,776	9,529,625	11,097,754	734,443	642,022	-	-
Residential and Farm Mortgages	69,224,602	86,779,255	66,973,732	84,174,342	2,250,871	2,558,719	-	46,194
Problem Mortgages	2,966,465	2,517,729	2,613,728	2,369,465	352,738	148,264	-	-
Non-Insurer Occupied Real Estate	21,390,505	21,553,868	16,755,647	16,833,288	4,460,273	4,557,146	174,585	163,435
Subtotal Real Estate Related	**675,285,861**	**731,705,517**	**643,196,894**	**696,973,931**	**31,591,866**	**34,050,928**	**497,101**	**680,658**
Non-Conforming LT Assets	246,881,779	266,808,499	164,907,850	177,569,603	72,454,621	79,140,000	9,519,308	10,098,896
Affiliated Investments (incl Occupied RE	883,279,365	867,885,273	339,826,528	374,490,294	499,601,310	449,612,434	43,851,527	43,782,545
Grand Total - Long Term Investments	**7,194,790,944**	**7,272,955,451**	**4,587,384,707**	**4,728,941,212**	**2,343,283,986**	**2,274,295,160**	**264,122,250**	**269,719,078**

In 2022, historic trends continued as long-term invested assets grew from $7.2 trillion to $7.3 trillion. Within that, unaffiliated long-term invested assets grew from $6.3 trillion to $6.4 trillion. Asset growth was represented in Life and Health insurance companies, while invested assets for Property & Casualty (P&C) insurers declined.

($ in 000s)	Industry Change		Life Insurers Change		P&C Insurers Change		Health Insurers Change	
	Dollars	Percentage	Dollars	Percentage	Dollars	Percentage	Dollars	Percentage
SHORT TERM INVESTMENTS								
ST Investments & Cash Equivalents	16,590,944	5.7%	4,227,305	3.7%	(107,025)	-0.1%	12,470,665	32.8%
LONG TERM INVESTMENTS								
Corporate Bonds	59,184,080	2.3%	28,016,865	1.3%	26,487,316	6.0%	4,679,899	6.4%
Bank Loans	18,342,341	20.5%	20,772,431	30.6%	(2,377,057)	-12.3%	(53,033)	-2.4%
Government Bonds (incl Municipals)	(4,389,727)	-0.5%	(11,795,518)	-2.9%	6,864,138	1.6%	541,652	1.1%
Agency CMBS	(6,459,770)	-8.7%	(5,265,357)	-11.8%	(1,109,973)	-3.9%	(84,440)	-4.4%
Agency RMBS	(5,583,149)	-2.4%	(17,627,327)	-13.9%	8,057,146	9.4%	3,987,032	18.2%
Agency ABS	242,104	1.1%	24,640	0.2%	189,464	2.3%	28,000	4.4%
Non-Agency CMBS	2,638,552	1.3%	4,278,759	2.8%	(2,387,648)	-4.9%	747,441	8.0%
Non-Agency RMBS	7,987,047	8.6%	5,049,876	7.1%	2,587,724	13.4%	349,446	11.5%
Non-Agency ABS	31,345,762	6.7%	27,560,862	7.6%	2,081,686	2.3%	1,703,214	10.7%
Hybrids	1,193,645	5.8%	1,450,985	9.7%	(173,778)	-3.5%	(83,562)	-12.7%
SVO Funds	(2,517,059)	-17.9%	748,696	23.5%	(1,841,804)	-27.9%	(1,423,951)	-33.3%
Subtotal Unaffiliated Bonds	**101,983,826**	**2.2%**	**53,214,914**	**1.6%**	**38,377,213**	**3.3%**	**10,391,699**	**5.7%**
Preferred Stock	(3,481,512)	-9.9%	(2,999,209)	-16.5%	(246,045)	-1.5%	(236,258)	-23.4%
Common Stock	(59,601,329)	-10.6%	(7,336,197)	-17.9%	(50,562,966)	-9.9%	(1,702,166)	-16.3%
Funds reported as Common Stock	(21,688,762)	-36.3%	(2,425,559)	-35.6%	(15,712,594)	-44.6%	(3,550,609)	-20.0%
Subtotal Unaffiliated Equity	**(84,771,603)**	**-12.9%**	**(12,760,964)**	**-19.3%**	**(66,521,605)**	**-11.9%**	**(5,489,034)**	**-18.8%**
Commercial Mortgage Loans	37,674,668	6.6%	35,174,920	6.4%	2,351,234	9.9%	148,514	46.0%
Mezzanine Loans	1,475,708	14.4%	1,568,129	16.5%	(92,421)	-12.6%	-	0.0%
Residential and Farm Mortgages	17,554,653	25.4%	17,200,610	25.7%	307,849	13.7%	46,194	0.0%
Problem Mortgages	(448,736)	-15.1%	(244,263)	-9.3%	(204,474)	-58.0%	-	0.0%
Non-Insurer Occupied Real Estate	163,363	0.8%	77,641	0.5%	96,873	2.2%	(11,150)	-6.4%
Subtotal Real Estate Related	**56,419,656**	**8.4%**	**53,777,037**	**8.4%**	**2,459,061**	**7.8%**	**183,557**	**36.9%**
Non-Conforming LT Assets	19,926,720	8.1%	12,661,753	7.7%	6,685,379	9.2%	579,588	6.1%
Affiliated Investments (incl Occupied RE	(15,394,092)	-1.7%	34,663,766	10.2%	(49,988,875)	-10.0%	(68,983)	-0.2%
Grand Total - Long Term Investments	**78,164,507**	**1.1%**	**141,556,505**	**3.1%**	**(68,988,826)**	**-2.9%**	**5,596,828**	**2.1%**

The increase in long-term invested assets represents relatively modest growth of 1.1%. Life insurer assets, which represent approximately 68% of the total, grew 3.1%, and Health insurer assets grew 2.1%, while P&C insurer assets declined by 2.9%. A significant reason for the decline in P&C insurers, which also impacted Life and Health insurers, was a decline in Common Stock holdings and other equity-related assets. Total Common Stock declined by $59.6 billion (including $50.6 billion for P&C insurers). Mutual Funds reported as Common Stock also declined by $21.7 billion. This was largely driven by the decline in equity markets in 2022, which likely also impacted Investments Reported on Schedule BA and Affiliated Investments, which are dominated by equity-like investments. On the other hand, Bond investments grew by $102.0 billion and Mortgage Loans, consisting of Commercial Mortgage Loans, Mezzanine Loans and Residential and Farm Mortgages, grew by $56.4 billion. Notwithstanding any negative pressure on valuations of Investments Reported on Schedule BA, such investments grew by $19.9 billion. This is partly due to a change in reporting of Residuals that were explicitly included in this category for 2022, as further discussed below.

	Insurance Industry		Life Insurers		P&C Insurers		Health Insurers	
	2021	2022	2021	2022	2021	2022	2021	2022
Bond Portfolio Maturity Score	12.49	12.64	14.38	14.44	8.02	8.43	7.73	8.08
1 or less	9.72%	9.05%	6.88%	6.49%	16.67%	14.80%	15.17%	17.13%
1 to 5	30.12%	30.78%	25.28%	25.94%	41.08%	42.17%	45.61%	42.59%
5 to 10	28.18%	27.08%	27.32%	26.35%	30.29%	28.91%	29.69%	28.10%
10 to 20	15.24%	16.24%	18.36%	19.23%	8.17%	9.52%	5.31%	6.90%
greater than 20	16.75%	16.85%	22.16%	21.99%	3.79%	4.60%	4.22%	5.29%
Greater than 10 year	31.99%	33.09%	40.51%	41.22%	11.96%	14.12%	9.53%	12.18%
Bond Portfolio Credit Sore	1.46	1.44	1.52	1.50	1.32	1.30	1.38	1.34
NAIC 1	62.57%	63.27%	56.78%	57.41%	76.88%	77.52%	72.38%	74.25%
NAIC 2	31.64%	31.58%	37.34%	37.21%	17.76%	18.03%	20.63%	20.09%
NAIC 3	3.53%	3.13%	3.78%	3.46%	2.72%	2.21%	4.19%	3.31%
NAIC 4	1.70%	1.50%	1.52%	1.38%	2.08%	1.74%	2.49%	2.08%
NAIC 5	0.41%	0.45%	0.42%	0.48%	0.43%	0.39%	0.20%	0.17%
NAIC 6	0.14%	0.07%	0.15%	0.06%	0.12%	0.09%	0.11%	0.09%
Below Investment Grade	5.79%	5.15%	5.88%	5.38%	5.35%	4.44%	6.99%	5.65%

Bond maturities are not a direct measure of duration but generally are an indicator of possible interest rate risk. In 2022, all three insurer types reported modest upticks on average bond maturities. Most significant were the increases in Bonds held that had maturities of greater than ten years. This is an important consideration given the increase in interest rates in 2022. In 2022, the benchmark 10-year Treasury yield increased by 237 basis points, while the 30-year increased 207 basis points and the 1-year increased by 433 basis points. These increases likely impacted the fair market value of fixed income investments significantly, with many fair market values now reported at less than carrying value. Life insurers were likely more severely impacted given that more than 40% of their Bond holdings had maturities of greater than ten years. While P&C and Health would also have been impacted, their overall portfolios are shorter in duration with percentages on Bonds with maturities of ten years or more in the low teens.

The credit quality of Bond portfolios for all three insurer types were relatively stable and improved slightly in both the weighted average NAIC Designation and the percent of Bonds that were below investment grade.

	Insurance Industry		Life Insurers		P&C Insurers		Health Insurers	
	2021	2022	2021	2022	2021	2022	2021	2022
	(as a percent of Unaffiliated Long Term Assets)							
Total Bonds	75.01	75.50	79.42	78.69	63.98	66.75	82.21	84.75
Corporate (plus Loans)	43.05	43.63	51.34	51.20	25.04	26.62	33.97	35.16
Governments	13.92	13.65	9.52	9.01	23.08	23.69	22.05	21.74
Structured	17.49	17.70	18.13	18.01	15.23	15.91	23.95	26.33
Mortgages and Real Estate	10.70	11.42	15.14	16.01	1.71	1.87	0.23	0.30
Equities (Preferred and Common)	10.38	8.91	1.56	1.22	30.38	27.05	13.24	10.48
Schedule BA	3.91	4.17	3.88	4.08	3.93	4.34	4.32	4.47
	(as a percent of Surplus)							
Equities (Preferred and Common)			13.85	11.41	43.02	40.50	13.65	10.63
Schedule BA			34.57	38.03	5.56	6.49	4.46	4.54

The basic profile of U.S. insurance company investments does not change very much from year to year. However, given the previously noted changes in Common Stock and Mortgage Loans, it is worth noting those changes as a percent of total unaffiliated long-term invested assets. Equities (including Preferred Stock, Common Stock and Mutual Funds reported as Common Stock) declined overall from 10.38% to 8.91%. This was driven mostly by the percentage change for P&C insurers, from 30.38% to 27.05%, and Health insurers, from 13.24% to 10.48%. Equities continues to be very significant as a percent of Surplus (40.50% for P&C, 11.41% for Life, and 10.63% for Health). Mortgage Loans increased as a percent of unaffiliated long-term invested assets and is most significant for Life companies, increasing from 15.14% to 16.01%.

Not apparent in the table above is the continued shift within the Structured Securities category. Within Structured Securities, Commercial Mortgage-Backed Securities ("CMBS") declined from 4.49% to 4.37% and Residential Mortgage-Backed Securities ("RMBS") declined slightly from 5.19% to 5.15%. Meanwhile, Asset-Backed Securities ("ABS") increased from 7.81% to 8.19%. Overall, the percentage increased modestly from 17.49% to 17.70%.

(000s)	Insurance Industry		Life Insurers		P&C Insurers		Health Insurers	
Derivatives	2021	2022	2021	2022	2021	2022	2021	2022
Carrying Value	37,736,738	17,514,973	37,746,812	17,571,469	(5,318)	(58,548)	(4,755)	2,053
Fair Value	49,650,980	7,200,853	49,719,960	7,242,872	(22,753)	(32,725)	(46,227)	(9,293)
Private Placements as % of Bonds			43.40	46.71	30.69	30.18	26.94	28.30
Foreign Bonds as a % of Total			17.51	17.22	8.64	8.13	8.56	8.41
Securities Lending and Repos	96,263,551	97,805,266	83,317,252	84,523,993	10,245,889	10,613,615	2,700,410	2,667,657
Assets Pledged as Collateal	238,725,961	335,213,997	199,441,890	295,069,556	32,802,445	34,304,991	6,481,627	5,839,450

Of significant note is the material change in both the carrying value and fair market value of derivatives positions. Derivatives activity is most significant with Life insurers. While most of the derivatives activity is for hedging purposes, only a small percentage is deemed to be Hedge Effective for Statutory Accounting purposes. This means that most derivatives exposures are held at fair market value. The decline in equity markets likely impacted valuations of equity-related derivatives. Also, a significant percentage of derivatives held are to hedge changes in interest rates. The sudden increase in interest rates as well as the curve inversion likely had significant negative impact on the valuation of many interest rate hedging derivatives.

In recent years, there has been increased focus on two different asset types held by insurers, Collateral Loans and Residual tranches of Structured Securities. Collateral Loans are reported on Schedule BA. While these investments still reflect less than one percent of invested assets across the insurance industry, their lack of transparency and concerns about valuation of the underlying assets has led to significant regulatory concern. The NAIC's Statutory Accounting Principles Working Group recently noted for emphasis and clarity that, to qualify as a Collateral Loan, the underlying assets must be eligible to be admitted assets. Other factors that have been discussed are that the fair market value of those assets must be at least equal to the value of the Collateral Loan and that this must be documented.

Also, the Statutory Accounting Principles Working Group added a new line item for Residual tranches of Structured Securities. These are often legally structured as debt securities but represent the equity risk in a Structured Security. These were reported for the first time in 2022 in Schedule BA and were previously reported in Schedule D as Bonds by most U.S. insurers. There are also some Residuals that are structured as Common Stock. Guidance has been clarified, but the expectation is that the total exposures are likely underreported to some degree.

(000's)	Insurance Industry		Life Insurers		P&C Insurers		Health Insurers	
New Data Collection beginning 2022	2021	2022	2021	2022	2021	2022	2021	2022
Collateral Loans								
Affiliated	9,656,948	11,844,349	8,372,771	10,925,699	679,771	489,395	604,406	429,255
Unaffiliated	7,480,816	6,656,176	6,593,296	6,015,176	886,985	638,222	535	2,777
Residuals								
Affiliated	n/a	8,163,410	n/a	3,182,761	n/a	4,771,871	n/a	208,779
Unaffiliated	n/a	3,564,512	n/a	2,532,121	n/a	829,889	n/a	202,501

Historic Trends

While many changes from 2021 to 2022 are notable, the majority are continuations of longer-term historical trends driven by changes in insurance company investment practices and changes in market dynamics. The one shift that was more specific to the circumstances of 2022 was the decline in Common Stock. The decline in overall Common Stock holdings came from both net sales as well as lower valuations as Common Stock is reported at fair market value.

The U.S. insurance industry's invested assets have been generally migrating away from more plain vanilla Bonds to more Structured Securities and Mortgage Loans. Since 2008, net issuance of Non-Agency RMBS has been a fraction of what it was. Growth in net issuance of CMBS, which is mostly Non-Agency, has leveled off, and has been down thus far in 2023. Meanwhile, growth in net issuance of ABS has been strong, driven largely by issuance of Collateralized Loan Obligations ("CLOs") and other similar structures such Collateralized Fund Obligations ("CFOs"). Net issuance of CLOs declined in 2022 and has continued to be soft in 2023. Originations of Commercial Mortgage Loans may similarly see a decline in the near term given concerns about property valuations and the performance of both Retail and Office sectors.

While not material from an overall industry perspective, exposure to Collateral Loans and Residuals are noteworthy because of the factors already mentioned. Individual insurance companies may also have more significant exposures. Collateral Loans have seen significant percentage increases in exposure in the last ten years. Although the reporting detail for Residuals is new, the same profile is likely also the case.

Historically, there has been regular focus on Credit Risk within insurance company portfolios. From the perspective of Bond holdings, exposure to this risk appears to have leveled off. There was a modest uptick in the industry's percentage holdings of below investment grade bonds in 2020 to 5.9% of the total, likely due to rating agency downgrades. This leveled off in 2021 at 5.8% and declined in 2022 to 5.1%. This is compared with the peak in 2009 of 6.0%. Bonds with a NAIC 2 Designation also leveled off in 2021 and held steady in 2022 at 31.6% of Bonds. NAIC 2 Designations have been growing steadily since at least 2006 when it was 18.5% of Bond holdings.

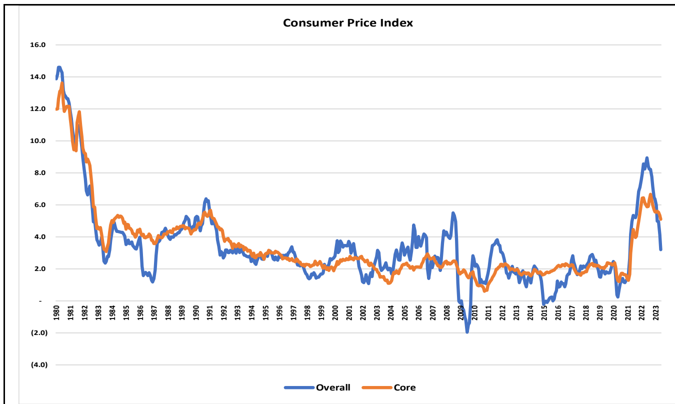
As a counterweight to the gradual increases in Structured Securities and Mortgage Loans, investments in Government Bonds, consisting of several different subcategories, has continued to decline. In 2011, Government Bonds accounted for 25.0% of total Bonds. By the end of 2022, this was only 18.1%.

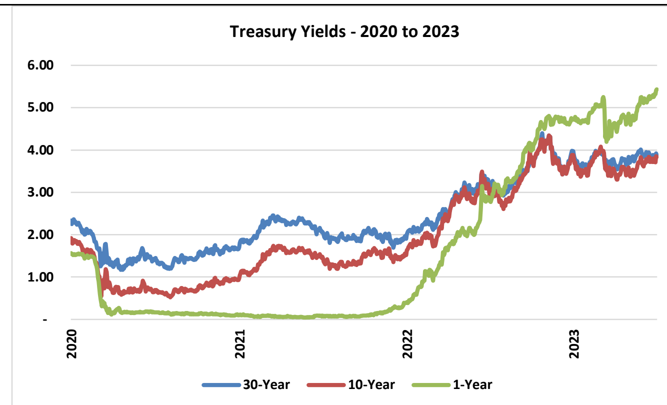
While there have been swings in interest rates over the last 15 years, the Bond maturity profile of the three insurer types has not changed significantly. There have often been concerns expressed that insurers have been taking on significantly greater interest rate risk in a search for yield. Increases in longer maturity bonds have been incremental and gradual. Life companies have been lengthening maturities and by the end of 2022 had 41.2% of Bonds with maturities of ten years or greater. This is compared with lower levels in 2008 of 30.4%. While there are other variables besides maturity that impact actual duration, a ten-year bond is likely to have a duration of around eight years, and a 30-year bond will have a duration of as high as twenty years or more. It is important to consider the various metrics for maturity or duration of an insurer's bond portfolio in the context of that company's liabilities. For Life insurers, the gradual lengthening of maturities may be appropriate, as liabilities have historically been longer in duration than what is available for invested assets. While a duration of twenty years means a 100 basis points increase in market yields will result in a decline in fair market value of as much as 20%, this may not be an issue or concern if the insurer can hold the bond until maturity. P&C and Health companies are expected to keep shorter duration portfolios. Their shorter duration and somewhat less predictable liability needs mean there is less of an ability to absorb market value volatility.

The U.S. insurance industry's derivatives activities, which are mostly among Life insurers, increased to $3.1 trillion in notional value in 2022. This has been increasing steadily since at least 2006 when the reported number was $495.4 billion. While a significant metric of activity, this does not represent a measure of risk or exposure. Most of the activity is also used for hedging purposes, although only a small percentage is deemed to be Hedge Effective for Statutory Accounting purposes.

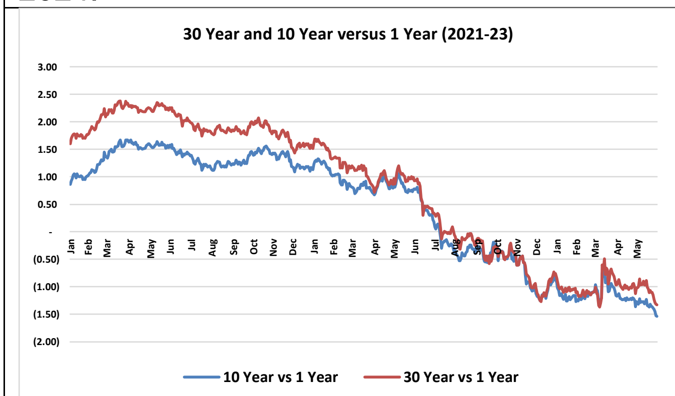
Markets (through June 30, 2023)

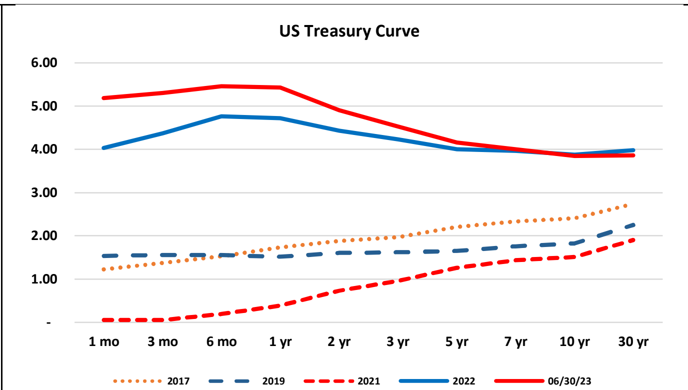
A principal driver for increased market volatility in 2022 through the first half of 2023 has been increased inflation beginning at the end of 2021 (see Market Briefing, January 12, 2023, "Market Recap for 2022 and Potential Impacts on Insurer Investments"). Inflation, as measured by the Consumer Price Index ("CPI") peaked at 9.1% in June 2022, with Core Inflation, which excludes Food and Energy, peaking at 6.6% in September 2022. Since then, both measures have declined as the Federal Reserve Board (the "Fed") dramatically increased interest rates. The June CPI data was reported on July 12th at 3.1% for the overall rate and 4.8% for the core rate (versus May data of 4.0% and 5.3%, respectively). This was also compared with the forecast from the Federal Reserve Bank of Cleveland that was an overall inflation rate of 3.2% and core inflation of 5.1%. Both measures are still above the Fed's target level of 2.0%.



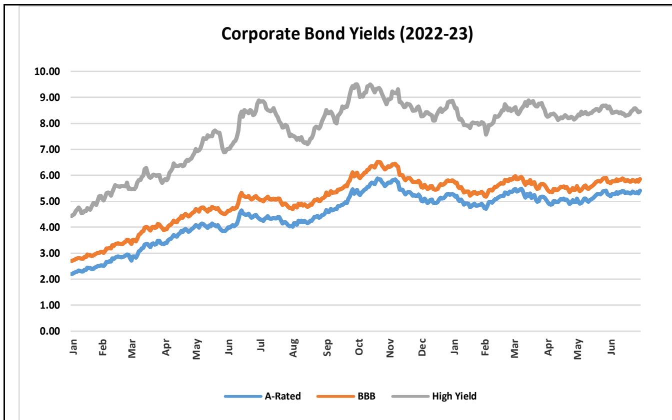


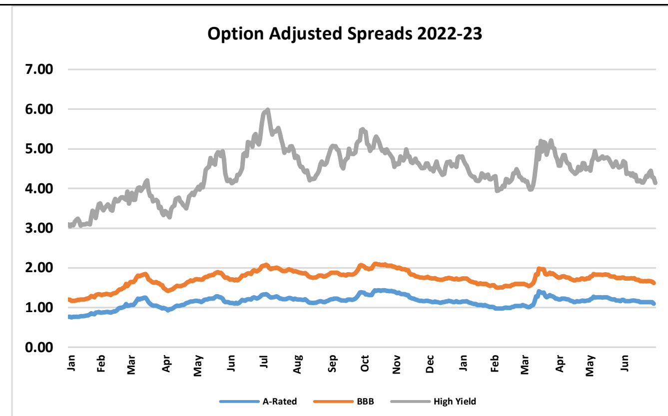
As the Fed increased interest rates by raising the target range for Federal Funds, short-term interest rates rose dramatically. While longer term interest rates in the marketplace also rose, the increase was not as significant. In comparison with year-end 2021, the 1-year Treasury yield has increased by 504 basis points. Over the same time period, the 10-year Treasury yield has increased just 232 basis points and the 30-year Treasury yield has increased 196 basis points. Since year-end 2022, the 1-year is up 70 basis points, but down 4 basis points for the 10-year and down 11 basis points for the 30-year. Longer term Treasury yields have not increased to the same degree because of expectations that the U.S. economy could enter a recession in either 2023 or 2024.



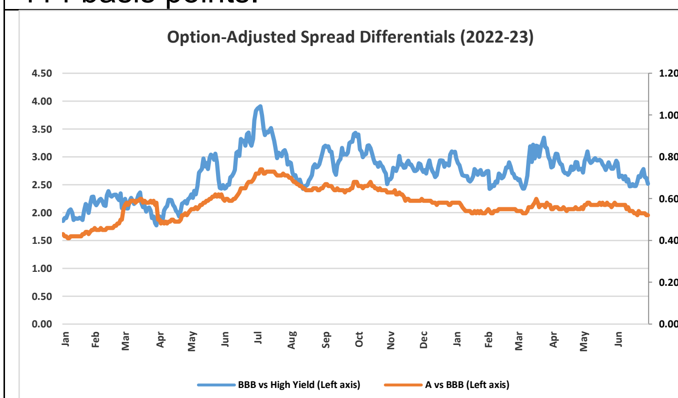


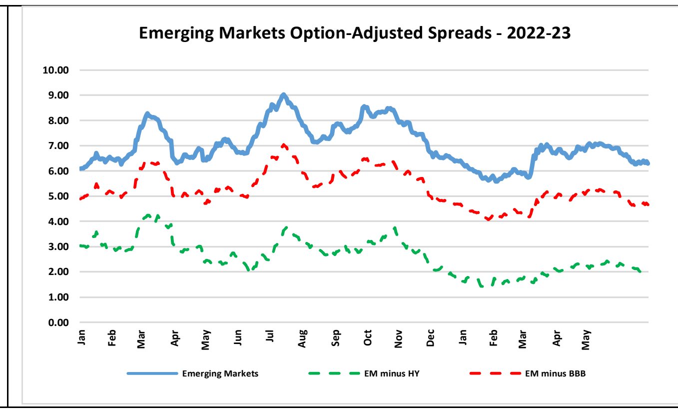
The result is that longer term Treasury yields are lower than shorter term Treasury yields, or an inverted yield curve. The degree of inversion depends on which two data points are used. The difference between the 30-year and the 10-year versus the 1-year is currently about 160 basis points. This is the most significant inversion and, having gone negative in July 2022, is the longest period that an inverted yield curve has lasted in recent memory. The anomalous nature of the curve inversion has impacted valuations in many market areas, most notably for interest rate related derivatives as mentioned earlier. The fair market value of fixed income investments has also been significantly impacted. The negative pressure on valuations is much more pronounced on longer term assets than short-term assets.





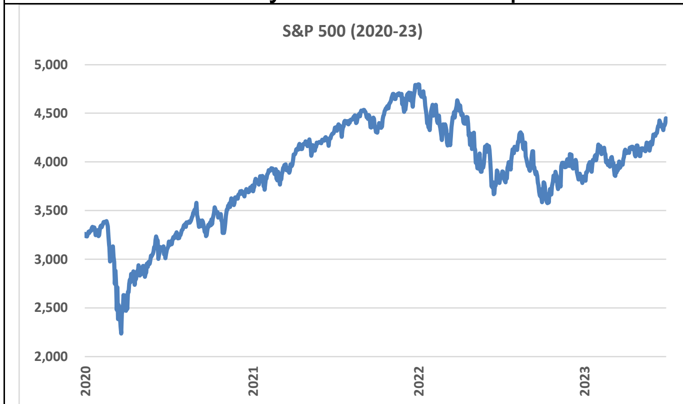
U.S. insurance company fixed income investments consist primarily of different kinds of risk assets, therefore Treasury yields are not entirely indicative of the potential market impact. Corporate bond yields are all significantly higher than they were at the end of 2021. The benchmark index for A-rated corporate bonds is yielding 330 basis points higher than at the end of 2021, while BBB-rated bonds are up 326 basis points and high yield bonds are up 409 basis points. In comparison with year-end 2022, A-rated corporate bonds are up slightly by 13 basis points and BBB-rated by 6 basis points, while the high yield index is down 43 basis points. These yields reflect option adjusted spreads for each of those credit quality indices. Option adjusted spreads are up for all three indices increased since year-end 2021, but spreads on high yield bonds have been expectedly very volatile over that time period, peaking at 600 basis points in July 2022 and more recently at 500 basis points in March 2023, before settling in at the current level of 414 basis points.

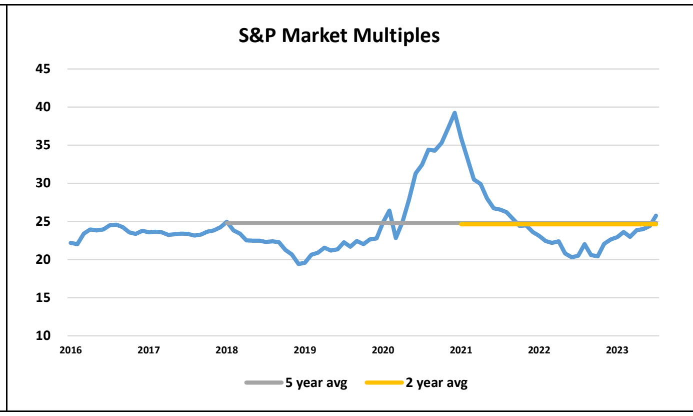




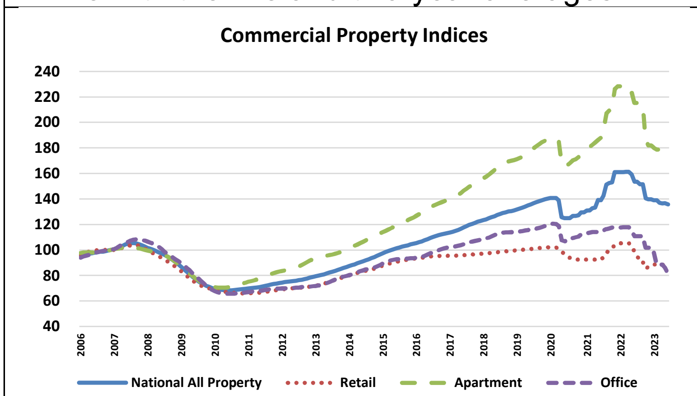
As concerns about the economy and markets vary over time, this is reflected in the differential between different categories of risk assets. The differential in option adjusted spreads between A-rated corporate bonds and BBB-rated corporate bonds are generally higher than they were at the end of 2021 and slightly lower than they were at the end of 2022, after peaking in July of 2022. The differential in option adjusted spreads between high yield bonds and BBB-rated bonds have followed a similar pattern, but with significantly greater volatility, peaking at 400 basis points in July 2022 and more recently at 340 basis points in March 2023, before settling in at the current differential of 250 basis points.

We continue to also monitor Emerging Market bonds as an example of a “cusp” asset. Emerging Market bonds are an asset that investors frequently reach for to gain better fixed income investment yields when concerns about market conditions are not high, but quickly move out of when those concerns rise. Emerging Market bond indices include bonds that cross over from weak BBB-rated to strong BB-rated categories. In the comparison with more traditional corporate bond indices, Emerging Market bond indices currently have an option adjusted spread that is about 628 basis points. In the comparison with high yield indices, the differential is higher than it was at the end of 2022 by about 55 basis points.





Equity markets have been also very volatile since 2020. The S&P 500 index was up 16.5% in 2020 and up 26.9% in 2021, but down 19.4% in 2022. Thus far in 2023, the S&P 500 index is up 15.9%. Equity values are reflective of recent earnings performance of the index components, but also expectations for future earnings and therefore expectations for the economy in the near term. There are differing opinions on the possibility of a recession in the near term and, if one does come to pass, how serious it would be. This was a principal driver of the weakness in 2022, but may also be indicative of expectations for earnings in 2023. An additional driver is the level of interest rates and expectations for interest rates going forward as this affects discount rates used in the valuation of Common Stock. Reflecting on equity valuations, the current market multiple is roughly in line with the five and two-year averages.



As previously noted, investments in commercial real estate related assets, primarily through Commercial Mortgage Loans is a significant asset class for Life insurers, and a small but growing asset class for P&C insurers. The value of commercial real estate assets is known for being very idiosyncratic. Still noteworthy are broad market indices which peaked in 2022 after a rapid recovery from the COVID-19 induced downturn in 2020. Since the end of 2022, concerns have increased significantly over valuations. This is the result of two main drivers. First, there are significant concerns about the future of Office property valuations as Work-From-Home dynamics have taken hold for at least now and reported occupancy rates for major city Central Business Districts are at low levels of approximately 50%. Second, the problems within the banking sector and the likely prospect of increased regulation are expected to lead bank lenders to be more conservative. This is in addition to more general concerns of a weaker economy and higher interest rates. Over the last twelve months, the Green Street Property Index has declined 11.5%, and the Office sector has declined nearly 30%.

Closing Thoughts

After an extended period of low interest rates and generally low market volatility from 2008 to 2019, the last three and half years have presented a very different environment and different challenges for U.S. insurance company investments and investment practices. Thus far, 2023 saw a spike in volatility in March due to failures in the banking sector (see Market Briefing, May 9, 2023, “A New Banking Crisis?”), but has generally settled in without too much difference from year-end 2022. This includes increased concerns over the financial sector and commercial real estate values. To the extent that higher interest rates had a negative impact on the fair market value of fixed income investments and certain derivatives exposures, this has not improved materially. Consensus over whether the U.S. economy will experience a “soft landing”, as inflationary pressures moderate, vacillates from one announcement of economic data to the next.

The underlying dynamics may have changed at least for the foreseeable future with (1) higher interest rates, (2) concerns over financial institutions, and (3) weaker valuations for commercial real estate properties and possible increases in defaults for Commercial Mortgage Loans. We recommend that insurance regulators consider how insurance companies may be adjusting to the new realities.

While higher interest rates and investment yields are beneficial to new investment allocations, there may be a material impact on the fair market valuations of existing holdings that were purchased before 2022. If the fair market value of these holdings is materially lower than current carrying value, this will likely have an impact on liquidity considerations and planning.

Investments in Financial Institutions are significant given that the sector has been one of the largest issuers of bonds for many years. While there may not be recognizable concerns about default, this will also impact valuations.

It has been reported by different analysts of the sector that a significant amount of Commercial Mortgage Loans is maturing over the next 12 to 18 months. With valuations weakening, especially for Office properties, and possibly more conservative bank underwriting standards, property owners may have difficulty refinancing significant balloon payments.