

Market Briefing

From: Edward Toy – Senior Manager, Investment Specialist (edward.toy@riskreg.com)

Date: January 27, 2022

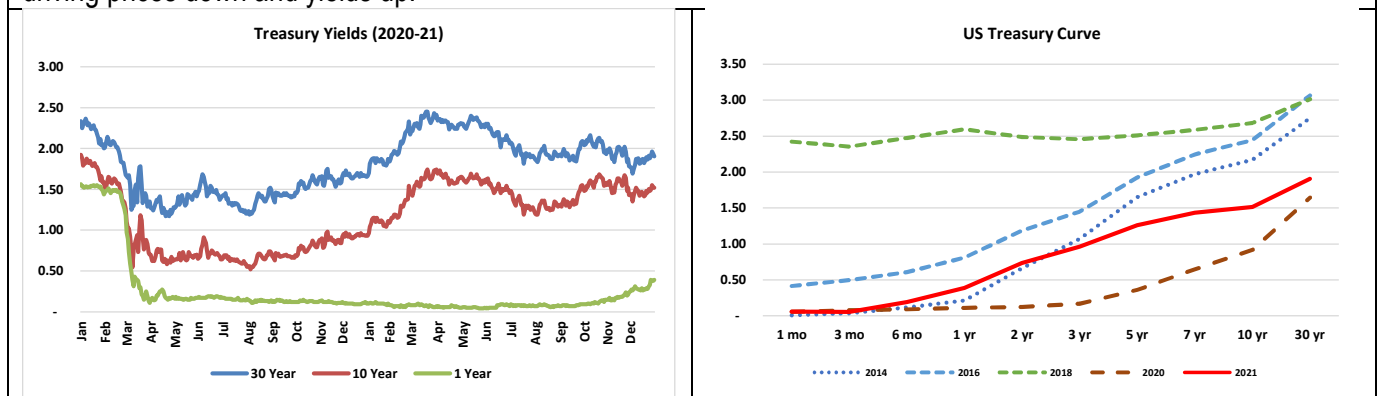
Subject: 2021 Review and Prospects for Regulatory Focus in 2022

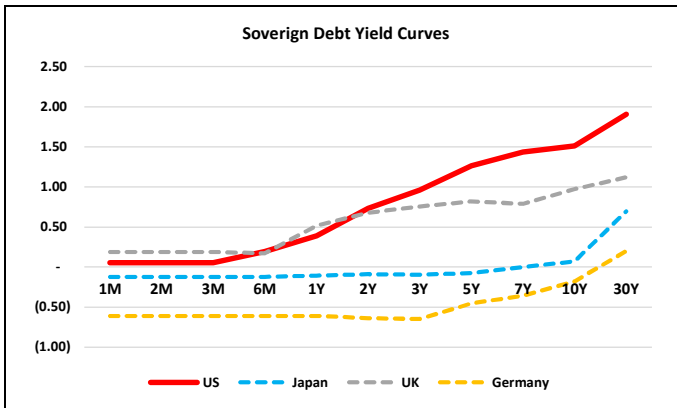
Introduction

2021 was generally a good year for investment markets after a tumultuous 2020. The S&P 500 reported an overall price gain of 26.9%. National indices of commercial real estate values recovered significantly. Bond defaults and rating agency downgrades moderated significantly. As insurance regulators head into 2022, and will soon start seeing financial statement filings from U.S. insurers for 2021, what are some of the market factors that are likely to have a material impact on insurers? For ease of reference, two tables showing U.S. insurer invested assets as of year 2019 and 2020 are appended to this report. The market data in this report was found in different publicly available sources including websites for the Federal Reserve Bank of St. Louis and the Securities Industry and Financial Markets Association.

Markets

With fixed income assets (Bonds and Mortgage Loans) representing more than 80% of U.S. insurers' unaffiliated invested assets, U.S. Treasury Yields continue to be a critical metric. The Federal Reserve Board (the Fed) took drastic action in early 2020, lowering short term interest rate targets and engaging in an unprecedented long-term bond buying program that drove interest rates across the entire yield curve down 100 or more basis points. As the economy began to recover, the Fed's initial plans suggested the accommodative policy would be maintained through 2022 and possibly into 2023. However, as the recovery strengthened and supply chain issues pushed a higher inflation rate, these plans changed. In the fall of 2020, the Fed began gradually reducing the bond buying program that had enlarged its balance sheet to \$10 trillion and has more recently noted the likelihood of as many as three interest rate increases in 2022. This has already nudged Treasury yields higher across the entire curve, although current levels are still lower than where they were at the end of 2019. The yield curve is also somewhat steeper, with a differential of 150 basis points between the 30-Year and the 1-Year Treasuries. This is the most significant differential since 2016, as market participants are looking to get ahead of the Fed unwind by selling long-term assets, driving prices down and yields up.

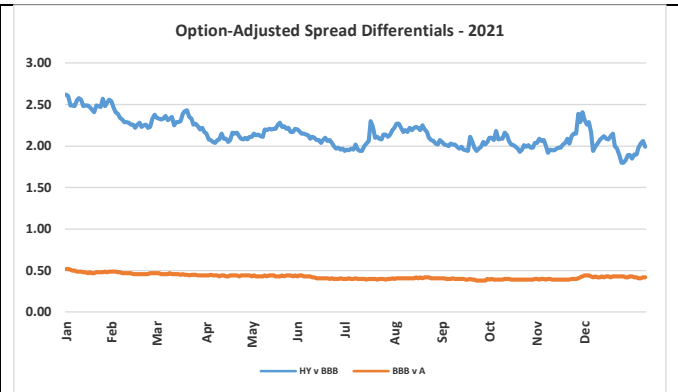
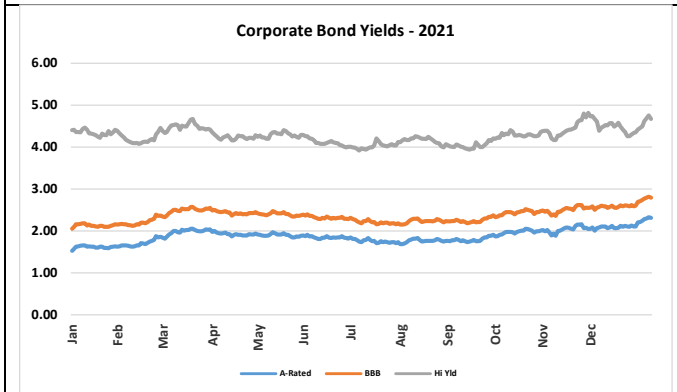




The comparison between U.S. Treasury yields and other major central stances remains relatively unchanged over time. While yields on sovereign debt of Japan and Germany have from time to time drifted slightly upwards, both of those countries currently have sovereign debt that has negative yields except for the longest maturities. Subject to the variability of currency exchange rates, this has an impact on cross-border flows of investment capital.

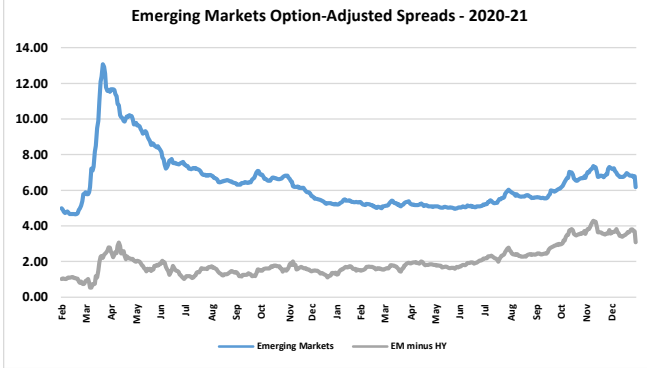
Corporate Bond Yields generally reflect U.S. Treasury Yields plus a spread meant to account for credit risk and other market factors, such as volatility and illiquidity. Yields on investment grade bonds (A-rated and BBB-rated) were generally fairly stable throughout 2021, though slowly increasing as yields on longer term U.S. Treasuries moved upwards. Since year-end 2020, Option-Adjusted Spreads (OAS) were relatively flat for A-rated bonds, and declined slightly for BBB-rated bonds from 130 to 120 basis points. For the high-yield market, OAS declined more significantly from 385 basis points to 310 basis points. OAS for high yield bonds had spiked to over 1000 basis points in March of 2020. This was followed by a relatively dramatic recovery as defaults among below investment grade bonds, while increasing above the prior years, did not reach anywhere near the levels that some analysts, including those at rating agencies, had been concerned about. Default rates continued to moderate in 2021.

Fair market values from year-end 2020 to year-2021 are likely relatively unchanged or modestly lower. As the Fed moves to increase interest rates in 2022 and beyond, this is likely to have a negative impact on fair market values. The prospects of further increases in interest rates, especially on the longer end of the curve, will continue to put downward pressure on fair market values. For longer dated bonds, an increase of 100 basis points on bond yields can result in a decline of 15 to 20 percentage points in market prices, depending on the specific structure and duration of the bond.

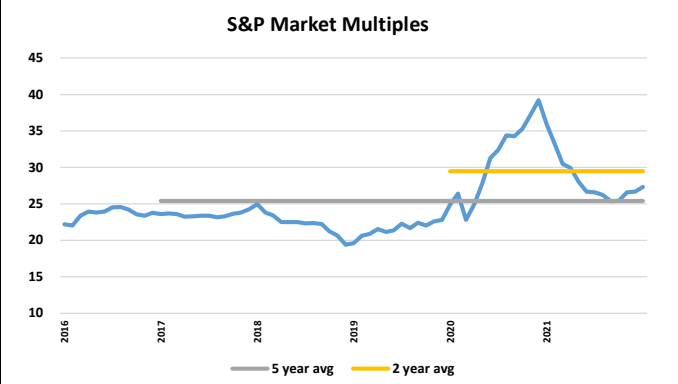
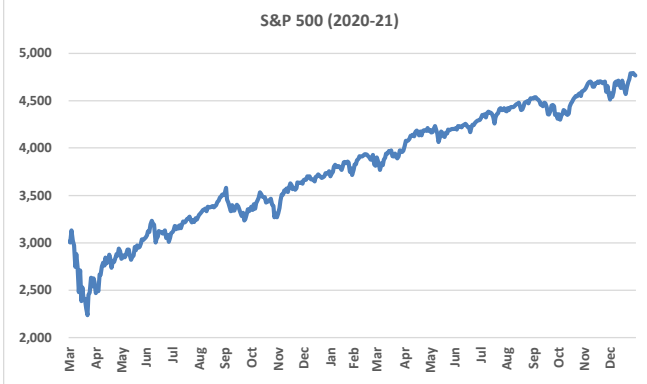


The differential between rating qualities has generally narrowed, between BBB-rated and A-rated bonds and between high yield and BBB-rated bonds. At its peak in March of 2020, the differential between BBB-rated bonds and high yield was 600 basis points as compared with the 200 basis points at the end of the year.

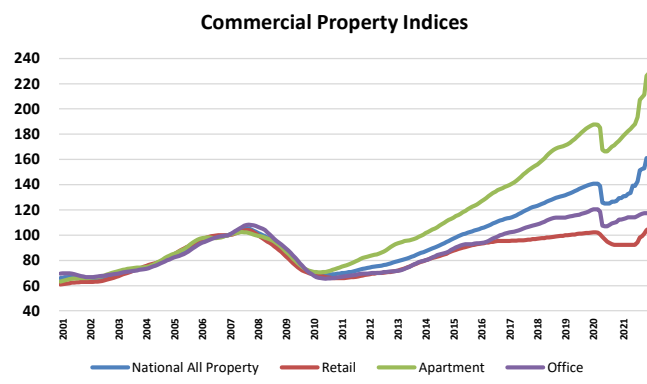
The differential of only 200 basis points between the BBB-rated and high yield bond indices is the lowest it has been since 2018. It reflects a return of the market's search for additional yield as defaults and downgrades moderated.



We continue to pay close attention to what we call “cusp markets”. These are asset classes that are more volatile than the more traditional assets of U.S. insurance companies but offer some incremental yield. One example is Emerging Markets debt, which tend to be right around the threshold of investment grade and below investment grade. After a dramatic recovery by the end of 2020 that was similar to U.S. corporate bonds, yields on Emerging Market debt drifted upwards. The differential with U.S. high yield debt also widened back out to about 400 basis points. This likely reflects lingering concerns about the impact of the COVID-19 Pandemic on smaller, weaker economies.



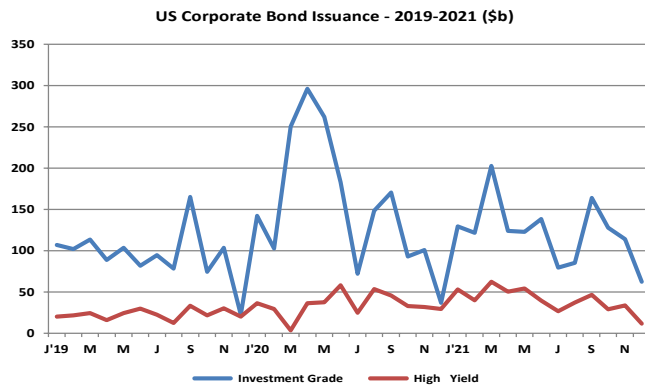
The performance of equity markets, as represented by the S&P 500, has been strong, very quickly recovering from the dramatic downturn in the spring of 2020 when the index dropped 30% in the span of six weeks. The S&P 500 ended 2020 actually up 16.5%. The equity market recovery preceded the recovery in earnings, leading to a brief spike in market multiples. Initially the recovery was not across all sectors as some were seen as being more significantly impacted by the COVID-19 Pandemic and the resulting economic turmoil. This included primarily Retail and any industry related to Travel and Leisure. Another sector that struggled was that of Financial Institutions, due to concerns about portfolio defaults and the impact of lower investment yields. As the fears of a dramatic jump in defaults did not materialize, equities in Financial Institutions improved. The Energy sector also initially struggled given a significant drop in oil prices. While there are still some concerns in these industries and sectors, the equity market recovery has evened out. In 2021, an index of Financial Institutions increased 32.4%. Insurers fared somewhat less well, increasing 20.2%, most likely due to concerns about the longer term impact of lower investment yields.



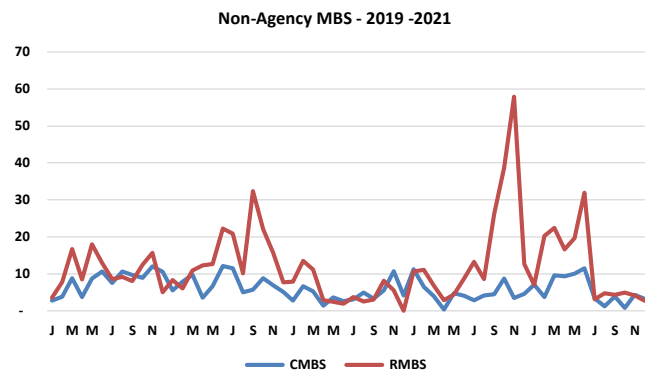
The economic shutdown in 2020 had a dramatic impact on commercial real estate values. Some retail malls and shopping centers closed. The Retail sector had already been struggling, as reflected by announcements of store closings and bankruptcies of well-known chains. The Pandemic has accelerated the restructuring of many Retail properties. Many tenants sought and were granted rent deferrals. Apartment properties on the other hand performed well throughout the period. Work-from-home mandates did not have an immediate impact on most Office properties as they are subject to long-term leases.

In 2021, there was a recovery in Retail property values, though still at a lower level compared to other property types. On the other hand, valuations of Office properties continue to be somewhat weak as investors may be assessing the longer-term impact of tenants deciding to stay with some degree of work-from-home. As leases slowly expire, larger tenants may opt for smaller spaces. There may also be some differentiation across different Office properties, between those in suburban areas versus Central Business Districts, and buildings that offer different amenities. In 2020, the NAIC's Life Risk-Based Capital (RBC) Working Group agreed to certain adjustments to the inputs for the Commercial Mortgage (CM) Quality Rating formula. This was under the assumption that the negative impact on commercial real estate in 2020 was transitory. While U.S. Life insurers are allowed to use a pro forma number for the calculation, they are still required to report the actual data points in the RBC Worksheet.

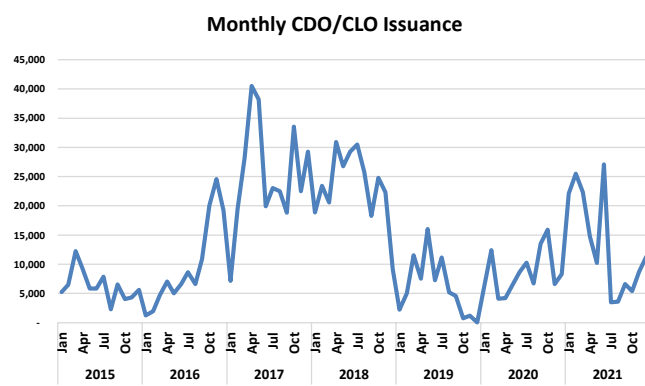
New Issue Volumes



Companies continued to take advantage of the low interest rate environment to issue new debt. Both investment grade and below investment bond issuance had been increasing annually since 2008, and both spiked further in 2021. Investment grade bond issuance in 2021 exceeded \$1.8 trillion, and below investment grade bond issuance edged above \$400 billion.



Notwithstanding a couple short-lived spikes in activity, issuance of Non-Agency Mortgage-Backed Securities continued at relatively low levels and are a shadow of what they were before the 2008 Financial Crisis. One factor that was significant in 2020, and continued into 2021, was a dramatic increase in prepayments of Residential Mortgage-Backed Securities (RMBS). In some cases, actual prepayment experience was as much as twice what had been forecast. This means insurers needed to reinvest at significantly lower yields and will likely experience significantly slower cash inflows from RMBS over time. Analysts continued to struggle with modifying their prepayment models through much of 2021 to account for the continued inflows.



Issuance of Collateralized Loan Obligations (CLOs) has been the topic of frequent discussions over the last ten years, and it has drawn the attention of financial regulators as the underlying assets are generally below investment grade borrowers. Issuance declined significantly in 2019 with increased attention of banking regulators, but returned in the latter part of 2020 and early 2021. This latest increase is at least partly due to banks looking to offload their exposure to assets that are tied to the London Interbank Borrowing Rate (LIBOR) prior to the transition from LIBOR to Secured Overnight Financing Rate (SOFR) at the end of 2021.

A Few Additional Words to Take Away

As we reviewed where markets ended in 2021 and are wrapping up the investment work for financial exams, there are some noteworthy highlights, or low lights. In that work, while the exams were conducted as of year-end 2020, we have also considered transactions activity in 2021 to discern if there are any material changes in investment practices. It is safe to say that trends, some of which may have taken a breather in 2020, continued in 2021.

There were many concerns about the performance of commercial real estate properties that support the U.S. insurance industry's Mortgage Loans. Notwithstanding some forbearance that was needed in some portfolios, it appears that the industry-wide exposure performed very well. Subject to some re-evaluations of underwriting criteria, industry exposure likely increased in 2021. For Life insurers, the 2021 RBC Worksheets may provide valuable insight as they will include actual 2020 Net Operating Income and Debt Service Coverage data. We noted an increase in less traditional activity. This included an increased exposure to Residential Mortgage Loans (that are not in RMBS) and an extension to construction loans of varying flavors. The monitoring and management of these assets are different, which warrant additional attention.

In general, the U.S. insurance industry's exposure to CLOs also appears to have performed well through the Pandemic. This is especially the case for those insurers that focused on senior and mezzanine classes, as opposed to subordinated classes. Fair market values have largely recovered. Where they have not recovered, it is likely due to downgrades, either actual or prospective.

As noted above, the significant increase in prepayment volatility in RMBS may have had a material impact on the cash flow management of many insurers. How insurers manage the cash flow variability is a potential concern. The large influx of cash needed to be reinvested at lower investment yields and, where reinvestment was in additional RMBS, there may be significant extension risk as interest rates rise. If their holdings are at carrying values that are significantly different from par, adherence to guidance on valuation in SSAP No. 43R is also an area to focus on.

Privately placed bonds as a percentage of the total portfolio had already been increasing over time. There may be a further shift to true private placements, as opposed to privately placed bonds that are tradeable under exemptions such as Rule 144A. Investment managers are continuing to press on directly-originated assets that are not widely distributed and may not be eligible under Rule 144A, hence are less liquid. While this may not present any different issues beyond those that are already on regulators' radar – Credit, Market and Liquidity – there is less transparency and possibly an incremental degree of risk.

Life insurers, in particular, also appear to have pressed further on Federal Home Loan Bank membership and the leveraging of assets. While the ability to earn a positive spread over the borrowing rate is enticing, this activity does need to be carefully monitored and managed. Insurers should have detailed guidelines on the duration mismatch between the tenor of the borrowing, the invested assets, and the assets pledged as collateral. The pledging of assets may also impact liquidity. Proper oversight by the Board is important to avoid adding significant risk to asset-liability management.

While Investments Reported on Schedule BA have always been a focus of regulators and growth in this exposure on an industry-wide basis has not been significant, valuation is an increased concern with more volatility and uncertainty in the market. Are insurers paying attention to valuation guidelines of the fund managers for private equity funds? Do they have enough information to determine that valuations are reasonable? Collateral Loans may also be more problematic.

And as a final note, volatility in the market can lead to significant volatility in Derivatives valuations. The increase in longer-term interest rates at the end of 2021 and expected for 2022 will have an impact on valuations of interest rate

swaps and other interest rate related derivatives. While this may not have a material impact for exposures deemed to be Hedge Effective for accounting purposes, other exposures will impact the insurers' financial statements.

A considerable amount of this activity and these trends are the result of U.S. insurers continuing to increase their reliance on investment managers, especially unaffiliated investment managers. While it is safe to say that most investment managers take their fiduciary responsibilities very seriously, greater vigilance over the investment management agreements, ensuring that they are fair and reasonable, is important.

It is also worth highlighting a change in NAIC guidance. Effective with year-end 2021 are new Risk-Based Capital factors for Bonds for all insurer types, and for real estate held by Life insurers. The new factors for Bonds are generally higher resulting in an increase on Risk-Based Capital requirements for most insurers. The preliminary indications are a 10% to 20% increase. This may be materially higher for those insurers that are more heavily exposed to certain rating grades, such as BBB-minus bonds. The increased granularity of the new factors were specifically intended to capture the appropriate differential and limit any inappropriate arbitrage of the guidance.

Appendix – U.S. Insurer Invested Assets as of Year-End 2019 and 2020

(\$000)	Total Insurance Industry		Life Insurers		Property & Casualty Insurers		Health Insurers	
	2019	2020	2019	2020	2019	2020	2019	2020
SHORT TERM INVESTMENTS								
ST Investments & Cash Equivalents	234,207,029	289,268,405	103,995,773	123,859,685	100,653,706	122,282,055	29,557,551	43,126,665
LONG TERM INVESTMENTS								
Corporate Bonds	2,297,854,079	2,493,529,290	1,871,517,729	2,016,375,234	371,946,857	413,432,448	54,389,492	63,721,608
Bank Loans	57,790,884	68,292,988	43,244,285	52,690,648	12,956,342	13,622,590	1,590,257	1,979,750
Government Bonds (incl Municipals)	810,733,807	831,119,580	380,143,385	393,040,630	392,440,487	394,948,673	38,149,936	43,130,277
Agency CMBS	79,010,434	78,056,027	50,472,186	49,147,036	26,426,681	26,527,754	2,111,567	2,381,237
Agency RMBS	283,498,724	260,317,344	164,959,870	144,877,922	96,489,182	91,648,334	22,049,673	23,791,088
Agency ABS	25,257,746	23,356,209	16,167,012	14,586,210	8,666,815	8,146,514	423,919	623,485
Non-Agency CMBS	185,536,782	193,025,773	139,058,304	142,078,403	40,539,962	43,694,484	5,938,516	7,252,886
Non-Agency RMBS	93,143,812	92,683,168	73,601,106	74,264,551	17,979,902	16,407,854	1,562,805	2,010,763
Non-Agency ABS	376,857,450	415,817,602	294,479,949	329,640,977	71,056,076	73,088,615	11,321,425	13,088,011
Hybrids	16,323,260	18,766,949	12,928,922	14,560,416	3,050,912	3,684,600	343,426	521,932
SVO Funds	8,685,414	14,088,321	3,219,718	6,055,922	2,767,122	4,502,047	2,698,573	3,530,352
Subtotal Unaffiliated Bonds	4,234,692,392	4,489,053,251	3,049,792,465	3,237,317,949	1,044,320,339	1,089,703,914	140,579,588	162,031,389
Preferred Stock	26,587,306	26,962,506	11,859,933	13,084,961	14,137,896	13,209,908	589,476	667,637
Common Stock	403,061,388	430,464,596	30,169,467	32,195,719	363,931,378	387,968,145	8,960,542	10,300,732
Funds reported as Common Stock	45,023,504	51,875,963	6,938,395	6,759,520	24,251,810	29,041,425	13,833,299	16,075,018
Subtotal Unaffiliated Equity	474,672,197	509,303,065	48,967,796	52,040,200	402,321,084	430,219,479	23,383,317	27,043,387
Commercial Mortgage Loans	521,655,332	541,882,684	501,712,901	520,715,772	19,759,577	20,987,004	182,854	179,907
Mezzanine Loans	10,400,921	10,343,103	9,400,998	9,667,870	999,922	675,233	-	-
Residential Mortgage Loans and Other	54,350,864	56,286,201	53,099,121	54,656,843	1,251,743	1,629,358	-	-
Problem Mortgages	1,472,695	2,753,695	1,304,874	2,306,348	167,822	447,347	-	-
Non-Insurer Occupied Real Estate	21,753,215	21,293,940	17,111,396	16,566,122	4,474,833	4,575,341	166,986	152,476
Subtotal Real Estate Related	609,633,026	632,559,622	582,629,289	603,912,956	26,653,897	28,314,283	349,840	332,384
Non-Conforming LT Assets	170,692,837	191,830,981	110,653,400	128,088,271	53,349,302	56,071,316	6,690,135	7,671,394
Affiliated Investments (incl Occupied RE)	742,668,851	809,826,720	272,062,892	292,129,511	434,130,612	477,778,577	36,475,347	39,918,632
Grand Total - Long Term Investments	6,232,359,304	6,632,573,640	4,064,105,843	4,313,488,886	1,960,775,234	2,082,087,568	207,478,227	236,997,186

Unaffiliated Invested Assets as a Percent of Total

(as a pct of Unaffiliated Investments)	Total Insurance Industry		Life Insurers		Property & Casualty Insurers		Health Insurers	
	2019	2020	2019	2020	2019	2020	2019	2020
ST Investments & Cash Equivalents	4.09	4.73	2.67	2.99	6.19	7.08	14.74	17.95
Corporate Bonds	40.14	40.80	48.04	48.64	22.86	23.95	27.12	26.53
Bank Loans	1.01	1.12	1.11	1.27	0.80	0.79	0.79	0.82
Government Bonds (incl Municipals)	14.16	13.60	9.76	9.48	24.12	22.87	19.02	17.96
Agency CMBS	1.38	1.28	1.30	1.19	1.62	1.54	1.05	0.99
Agency RMBS	4.95	4.26	4.23	3.50	5.93	5.31	10.99	9.90
Agency ABS	0.44	0.38	0.41	0.35	0.53	0.47	0.21	0.26
Non-Agency CMBS	3.24	3.16	3.57	3.43	2.49	2.53	2.96	3.02
Non-Agency RMBS	1.63	1.52	1.89	1.79	1.10	0.95	0.78	0.84
Non-Agency ABS	6.58	6.80	7.56	7.95	4.37	4.23	5.64	5.45
Hybrids	0.29	0.31	0.33	0.35	0.19	0.21	0.17	0.22
SVO Funds	0.15	0.23	0.08	0.15	0.17	0.26	1.35	1.47
Subtotal Unaffiliated Bonds	73.98	73.45	78.28	78.10	64.18	63.11	70.09	67.46
Preferred Stock	0.46	0.44	0.30	0.32	0.87	0.77	0.29	0.28
Common Stock	7.04	7.04	0.77	0.78	22.36	22.47	4.47	4.29
Funds reported as Common Stock	0.79	0.85	0.18	0.16	1.49	1.68	6.90	6.69
Subtotal Unaffiliated Equity	8.29	8.33	1.26	1.26	24.72	24.92	11.66	11.26
Commercial Mortgage Loans	9.11	8.87	12.88	12.56	1.21	1.22	0.09	0.07
Mezzanine Loans	0.18	0.17	0.24	0.23	0.06	0.04	-	-
Residential Mortgage Loans and Other	0.95	0.92	1.36	1.32	0.08	0.09	-	-
Problem Mortgages	0.03	0.05	0.03	0.06	0.01	0.03	-	-
Non-Insurer Occupied Real Estate	0.38	0.35	0.44	0.40	0.27	0.26	0.08	0.06
Subtotal Real Estate Related	10.65	10.35	14.95	14.57	1.64	1.64	0.17	0.14
Non-Conforming LT Assets	2.98	3.14	2.84	3.09	3.28	3.25	3.34	3.19
Unaffiliated Invested Assets	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00