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Market Briefing

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Date: August 9, 2022

Subject: Differences in U.S. Insurance Industry Invested Assets by Asset Size

Introduction

It is commonly understood that investment profiles, strategies and practices differ among U.S. insurance companies. Life insurance companies invest differently from Property & Casualty ("P&C) and Health insurance companies. These differences reflect different needs in asset-liability management and meeting liquidity requirements. In addition to differences across insurer types, however, there are significant differences in investment portfolios when comparing different sized insurers within each of those insurer types. Smaller companies rely on different investment practices than larger companies. There are many reasons for this. Substantively, smaller insurers tend to have less flexibility and are less able to absorb the market volatility of more complex, less liquid asset types. As always, the specific needs of individual insurers should be considered on their own. Smaller institutions also may have less access to certain markets. This dynamic has changed somewhat with the increasing reliance on unaffiliated investment managers, but that transition is the subject of a different discussion. This Market Briefing provides some basic analysis into the differences in portfolios by grouping insurance companies for each insurer type into common size categories. *[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

	Combined		Life		P&C		Health	
	2020	2021	2020	2021	2020	2021	2020	2021
Bonds as percent of ULT	76.98	74.97	80.45	79.40	67.84	64.01	82.30	82.17
Corporate (plus Loans)	43.84	43.03	51.42	51.36	26.52	25.07	33.34	33.93
Governments	14.33	13.90	9.75	9.47	24.64	23.07	21.90	21.99
Structured	18.26	17.50	18.78	18.15	16.16	15.24	25.02	24.00
Mortgages and Real Estate as % of ULT	10.85	10.72	15.09	15.21	1.74	1.71	0.17	0.23
Equities as percent of ULT	8.88	10.41	1.30	1.55	26.90	30.35	13.65	13.24
Schedule BA as percent of ULT	3.29	3.89	3.17	3.85	3.51	3.93	3.88	4.36
Equities as percent of Surplus	28.90	32.89	11.84	13.73	37.95	42.99	13.80	13.65
Schedule BA as percent of Surplus	10.69	12.29	28.80	34.20	4.95	5.57	3.92	4.49

RRC's last Market Briefing, dated May 11, 2022, considered total U.S. insurance industry assets of $7.2 trillion as of year-end 2021, the different profiles between Life, P&C and Health, and also focused on changes over the last ten to fifteen years. As a short reminder, the asset allocations as a percent of Unaffiliated Long Term Invested

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Assets ("ULT") differed significantly for each of the insurer types, though common across all three was a substantial weighting to fixed income assets, especially for Life and Health. Equity exposure, which includes common stock, preferred stock and mutual funds reported as common stock, was more substantial within the P&C industry, both as a percent of ULT and as a percent of Surplus. The latter detail was in part driven by larger P&C insurers but was also prevalent across the entire P&C industry. Also notable was a lower percentage allocation to Government Bonds and a higher allocation to Mortgage Loans among Life companies.

	Combined		Life		P&C		Health	
	2020Y	2021Y	2020Y	2021Y	2020Y	2021Y	2020Y	2021Y
Bond Portfolio Maturity Score	12.19	12.49	13.95	14.38	7.95	8.02	7.36	7.74
1 or less	10.45%	9.72%	7.75%	6.89%	16.76%	16.67%	19.19%	15.16%
1 to 5	30.48%	30.12%	25.83%	25.29%	41.54%	41.07%	44.43%	45.56%
5 to 10	28.60%	28.18%	28.08%	27.33%	30.18%	30.29%	27.70%	29.69%
10 to 20	14.37%	15.24%	17.29%	18.35%	7.65%	8.17%	4.29%	5.34%
greater than 20	16.10%	16.75%	21.05%	22.15%	3.87%	3.80%	4.40%	4.25%
Greater than 10 year	30.47%	31.99%	38.33%	40.50%	11.52%	11.97%	8.68%	9.59%

Bond maturities are not a direct measure of duration but generally are an indicator of possible interest rate risk. In 2021, all three insurer types reported modest upticks on average bond maturities. Reflecting the longer duration liabilities of Life companies, the average maturity of Bond portfolios at Life insurers was significantly longer than for P&C and Health.

	Combined		Life		P&C		Health	
	2020Y	2021Y	2020Y	2021Y	2020Y	2021Y	2020Y	2021Y
Bond Portfolio Credit Sore	1.46	1.46	1.52	1.52	1.31	1.32	1.34	1.38
NAIC 1	63.01%	62.58%	57.33%	56.79%	77.25%	76.88%	74.43%	72.31%
NAIC 2	31.09%	31.64%	36.49%	37.33%	17.60%	17.77%	19.69%	20.66%
NAIC 3	3.65%	3.53%	4.02%	3.78%	2.64%	2.73%	3.46%	4.21%
NAIC 4	1.68%	1.70%	1.57%	1.52%	1.91%	2.08%	2.09%	2.51%
NAIC 5	0.49%	0.41%	0.51%	0.42%	0.47%	0.43%	0.24%	0.20%
NAIC 6	0.09%	0.14%	0.07%	0.15%	0.13%	0.12%	0.09%	0.11%
Below Investment Grade	5.90%	5.79%	6.18%	5.88%	5.14%	5.35%	5.88%	7.03%

From the standpoint of credit risk in the Bond portfolios, Life insurers also had lower allocations to Bonds with a NAIC 1 Designation, largely reflecting the lower exposure to Government Bonds. Investments in below investment grade Bonds have grown more comparable over time between the three insurer types, but Life insurers had a materially higher percentage in Bonds with a NAIC 2 Designation, leading to a lower overall quality credit score.

General Comments

It is beyond the scope of this Market Briefing to go through every different asset class or every different metric. Instead, the focus will be on certain specific areas of risk or asset class distinctions that have been the subject of recent discussions, including differences in credit quality and maturity profiles. There also has been a focus on certain asset types that are considered more volatile or of greater regulatory concern for different reasons. These would include Real Estate related investments, primarily Mortgage Loans, Asset-Backed Securities ("ABS"), which includes Collateralized Loan Obligations ("CLOs") and Investments Reported on Schedule BA. With respect to Real Estate related investments and Investments Reported on Schedule BA, those exposures are more significant among Life insurers. The data used only reflects unaffiliated investments, so it does not include insurer-occupied Real Estate, which can be material among some insurers, especially Health companies.

For this analysis, we have divided the data into seven groups based on size of net admitted assets. The intention was to have each group represent a reasonable percentage of each insurer type by number of companies and total net admitted assets. The group of smallest insurers consists of the companies with $10 million or less in net admitted assets. The group of largest insurers consists of companies with $10 billion or more in net admitted assets. This latter group is somewhat less diversified as there are fewer companies that are that large.

The data represents only General Account assets and includes over 600 Life insurers, over 2,500 P&C insurers and more than 1,000 Health insurers.

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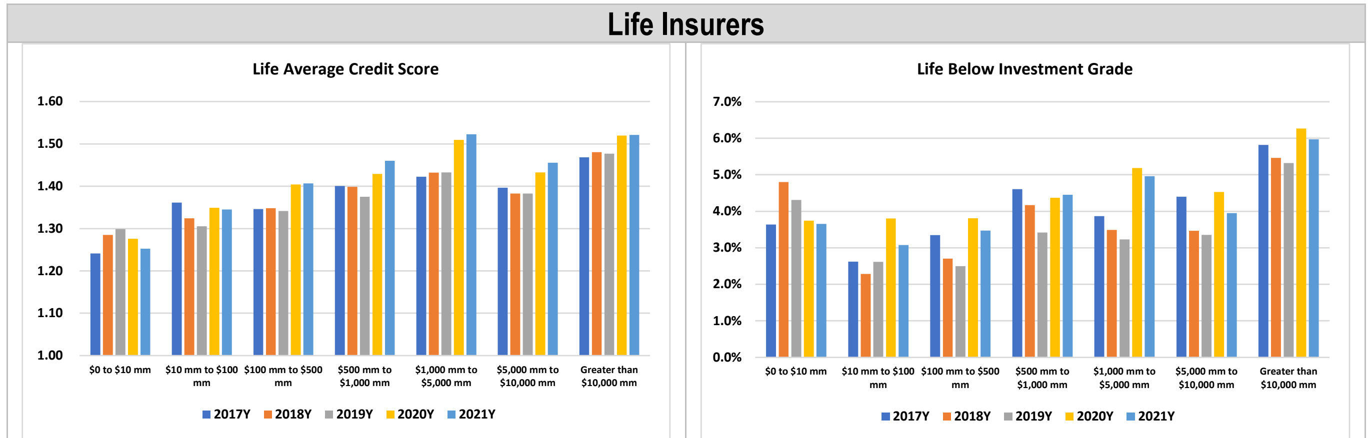
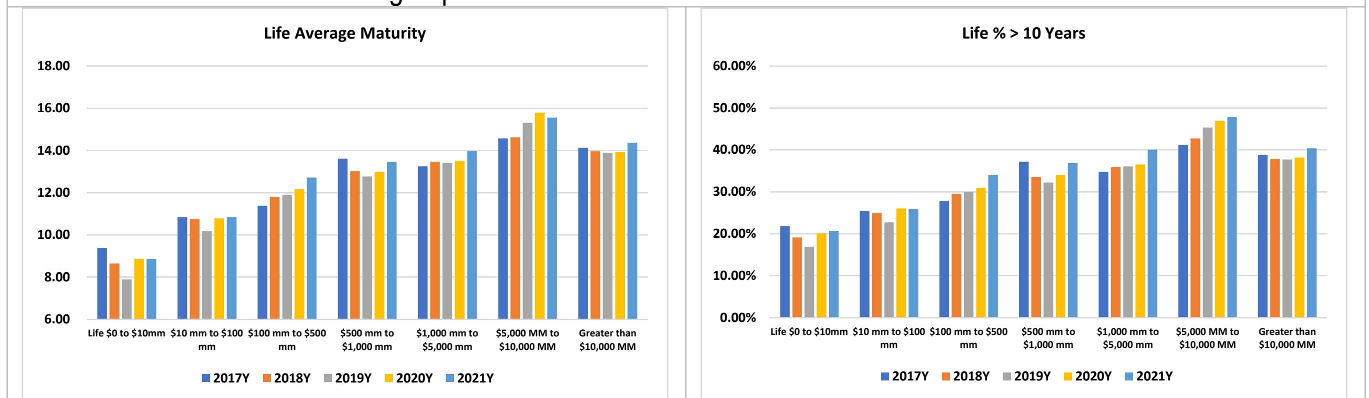
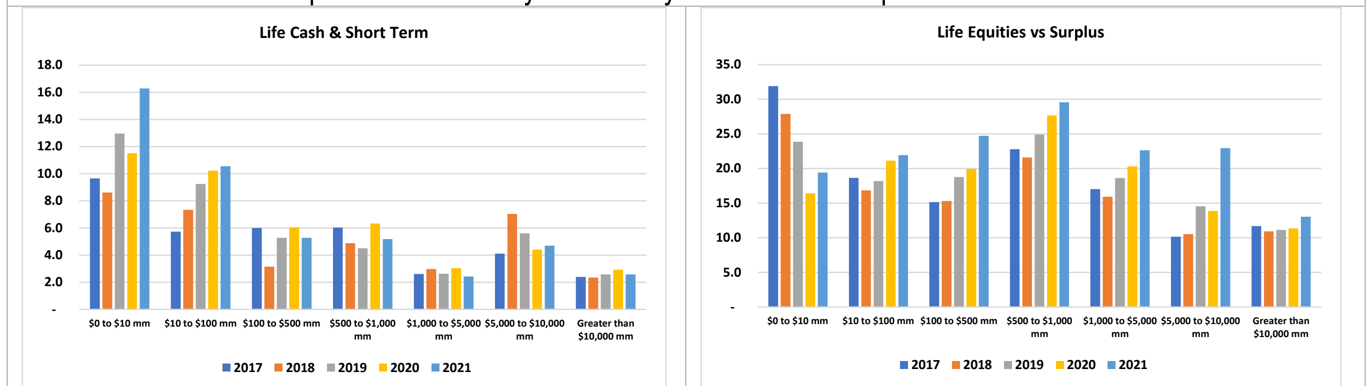
Life Insurers



Historically, Life insurers have been more comfortable with taking on credit risk. Using NAIC Designations, the average NAIC Designation for the largest companies recently ticked over 1.50 in recent years, having been on a slow increasing trend since 2019. The average is significantly lower for the smallest Life companies at less than 1.30 and has remained relatively static for the two smaller groups. In part reflecting a similar dynamic is the exposure to below investment grade bonds which is highest at the largest companies at just about 6.0%, but materially lower for all of the other different size groups.



With what had been the prevailing low interest rate environment, another way for generating more portfolio yield was to invest in longer maturity bonds. Longer maturities generally reflect longer duration and, therefore, greater interest rate volatility. Longer duration investments are usually thought to match better with Life insurer liabilities. The duration of a Life insurer's liabilities depends on the type of products that it sells and is not necessarily reflective of the size of the company. With that as a qualifying statement, there are recognizable trends by size of Life insurer. Over time, from 2017 to 2021, both average maturity of the Bond portfolio and percent of the Bond portfolio that has ten-year or longer maturities have been increasing. The one exception is the group of largest Life insurers which has a somewhat shorter profile that has stayed relatively static in the time period.



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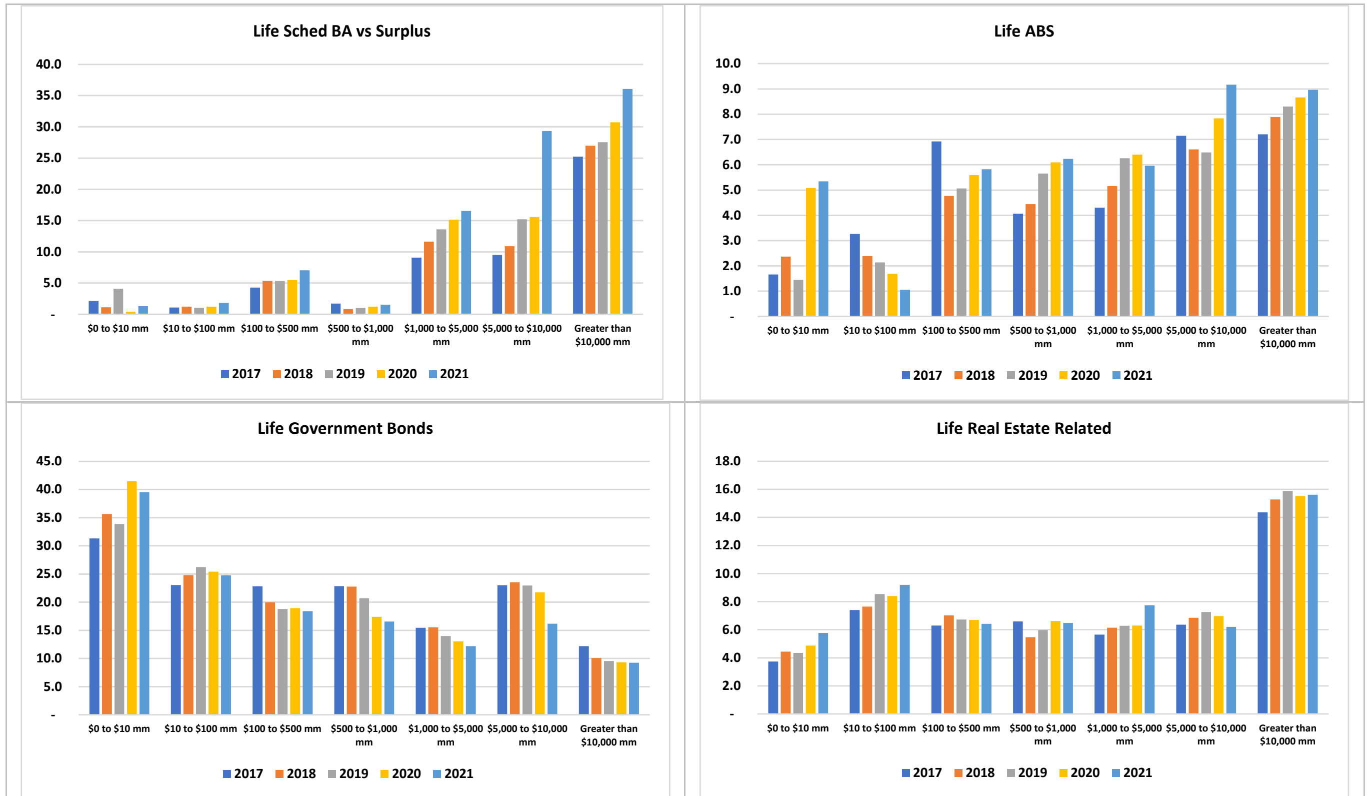

For the different exposures in invested assets, smaller Life insurers generally reflect a more conservative, more liquid profile. The smallest Life insurers maintain a higher percentage in Cash and Short-Term investments and in Government Bonds. Most of the Life industry's investments in ABS and in Investments Reported on Schedule BA are at the largest insurers. That is also the case for Real Estate related assets where the largest Life insurers have more than 15% of ULT in that asset type as compared with the rest of the Life industry which is at 8% or less, and at less than 4% for the group of smallest Life insurers. One exception to this general statement is Equities as percent of Surplus, where the group of smaller Life insurers had a materially higher percentage, though this trend has declined significantly since 2017.

Property & Casualty Insurers

The two graphs above demonstrate a consist trend over time and from the group of smallest P&C insurers to the largest. Average credit quality has been declining over time as the percentage of below investment grade Bonds has been increasing. The two groups of smallest P&C insurers remain relatively conservative across both metrics. On the other hand, the profile of the groups of largest P&C insurers approaches metrics that are similar to those for Life insurers.

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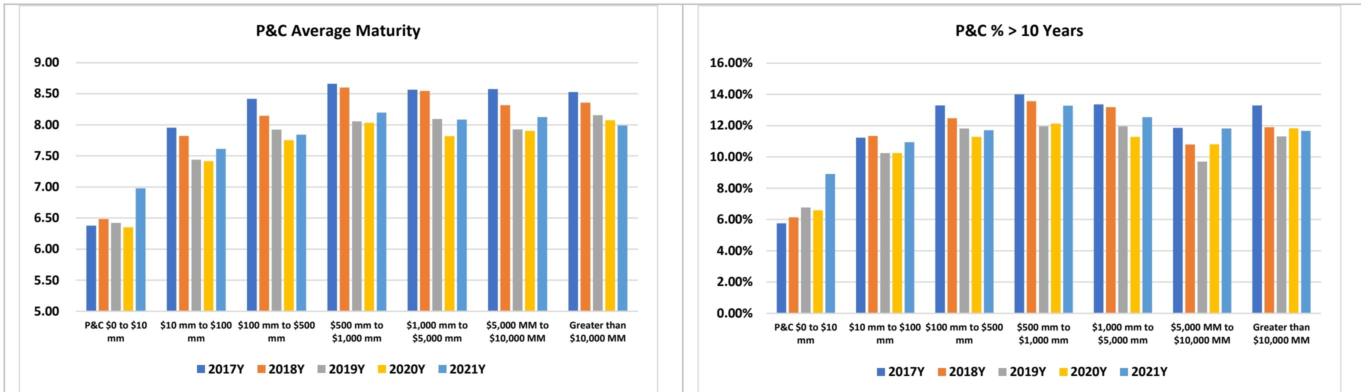
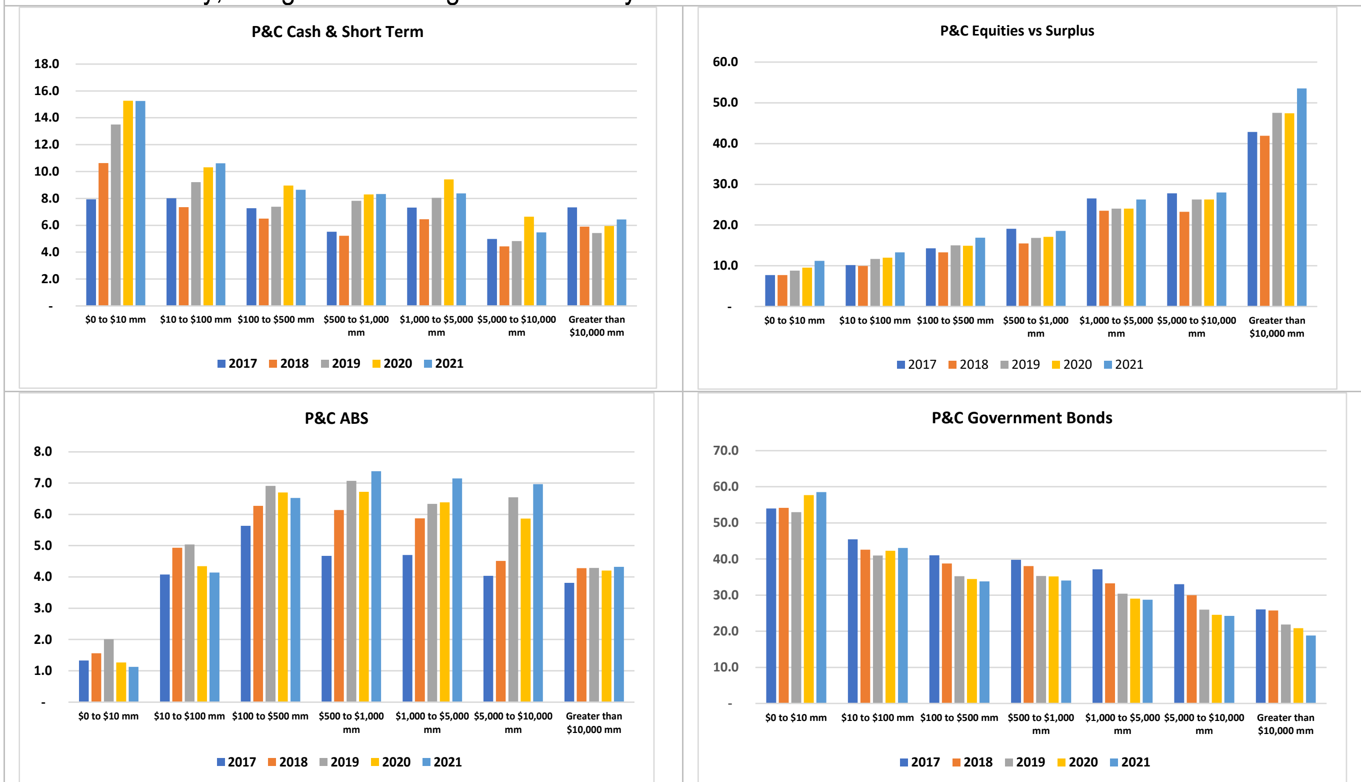


P&C insurers tend to maintain shorter duration portfolios as compared with Life, reflecting shorter and less predictable liability structures. There has been a modest decline in the average maturity of the Bond portfolios over the five-year period. The group of smallest P&C companies has a materially shorter maturity profile than the rest of the P&C industry, though that did lengthen noticeably in 2021.



P&C insurers have generally kept stable percentages of Cash and Short-Term Investments, with notably more liquidity at the group of smallest P&C insurers. As Government Bonds can often serve as a secondary source of liquidity in volatile markets, this is also reflected in those holdings as a percent of ULT. For Government Bonds, with increasing size of the insurer, percentage allocation decreases, and within each group, there has been a gradual decrease over time. For the group of largest P&C insurers, Government Bond holdings declined below 20% in 2021. Both this and the general trends noted are offset by a gradual increase in Equity exposures. Equity exposures for the group of largest P&C insurers ticked above 50% of Surplus in 2021. This was significantly driven even more so by the largest P&C insurers within that group. The large exposure to Equities also translates into a smaller percentage allocation to ABS with the group of largest P&C companies. For most P&C insurers, investments in ABS have increased over the five-year time period but remain a relatively small percentage in the group of smallest P&C companies. Investments Reported on Schedule BA and Real Estate related investments in the P&C industry

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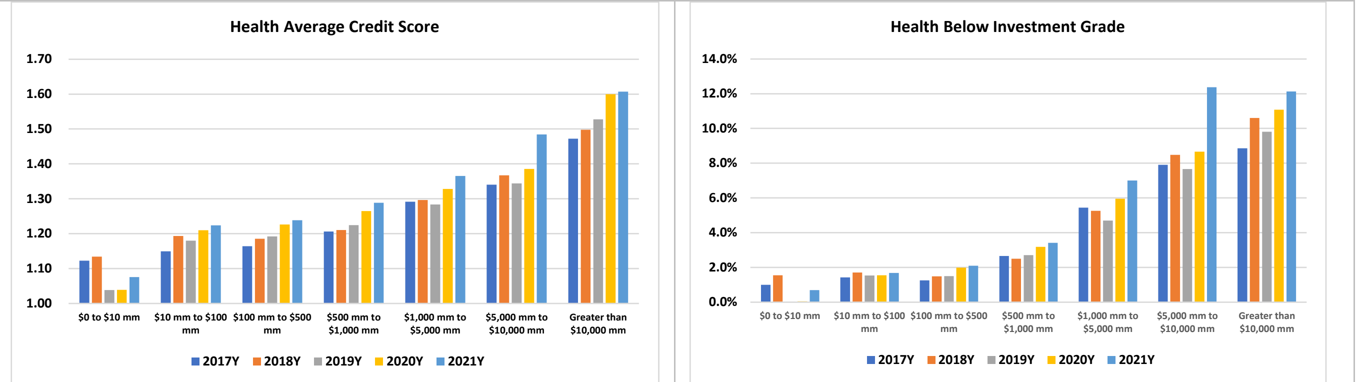
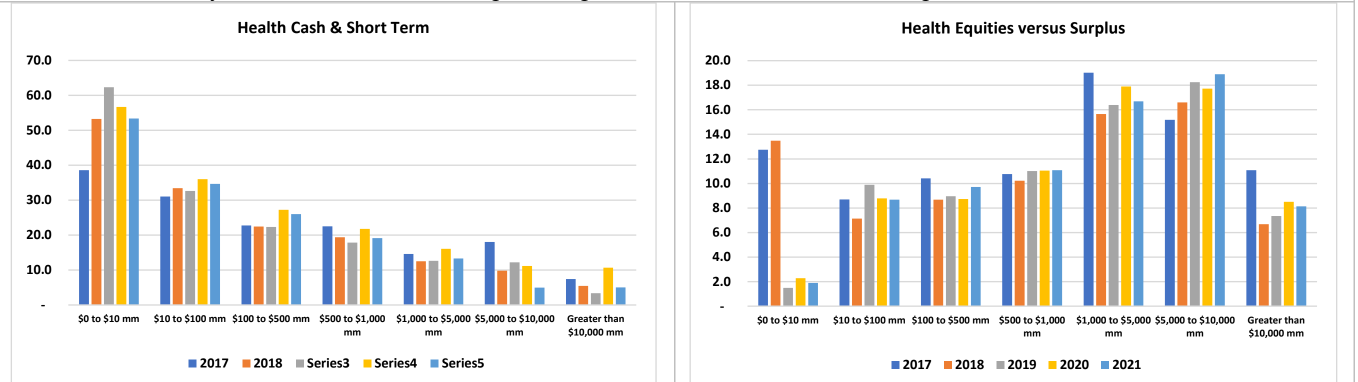
have also increased in recent years but remain not that significant in the P&C industry. (These latter graphs were not included in the above.) For the larger P&C insurers, Investments Reported on Schedule BA account for between 5% and 9% of Surplus. Real Estate related investments account for just over 2% of ULT in the group of largest P&C companies. In both of these latter asset groups, the exposure at the smaller P&C insurers is not material.

Health Insurers



With the exception of the group of smallest Health insurers, credit risk has increased significantly among Health companies in recent years. The average credit score for each of the other groups has been weakening driven by increases in below investment grade Bond holdings. These increases were most pronounced among the largest Health insurers in 2020 and 2021 where below investment grade Bonds now account for more than 12% of the total.

Similar to the P&C industry, Health insurers tend to maintain Bond portfolios that have shorter maturities, which includes limited holdings of Bonds with maturities of ten years or longer. This has remained relatively consistent over the last five years. There is some higher degree of duration risk at the larger Health insurers.



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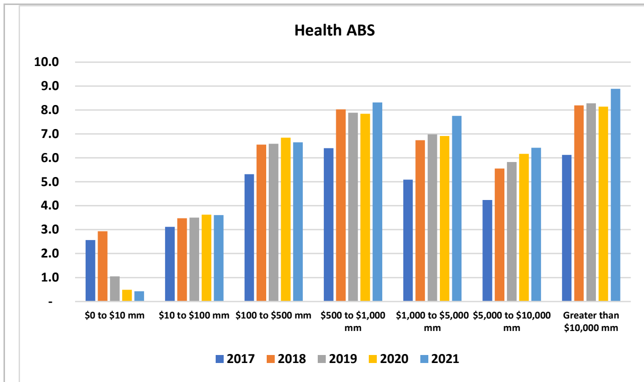
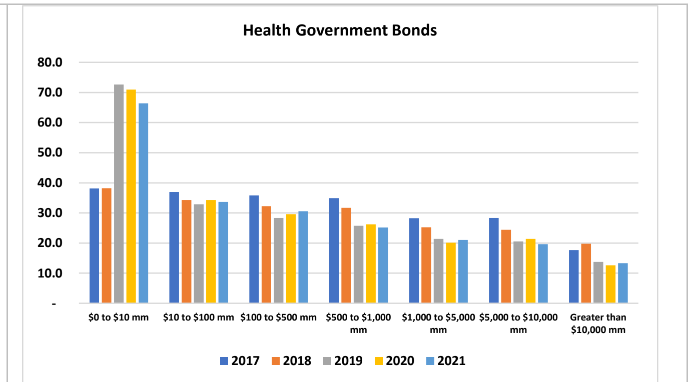


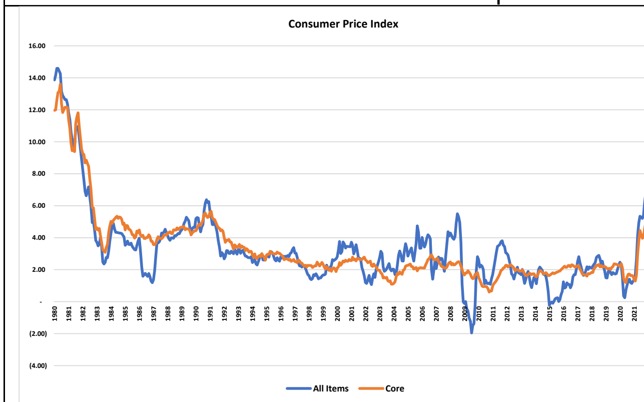


The groups of smaller Health insurers maintain high degrees of liquidity through both Cash & Short-Term Investments as well as holdings of Government Bonds. This is less the case with larger Health companies. There has been some decline in the percent of Government Bond holdings among the larger Health companies. Equity holdings as a percent of Surplus is signficant at the larger Health insurers. There has also been increases in allocations to ABS at the larger Health insurers, pulling them farther away from the smaller companies in this respect.

Markets (through July 28, 2022)

A Market Briefing would, of course, be incomplete without some discussion about what has been happening with various market metrics. A major economic indicator has weighed on all of the markets in recent months, and that is reported inflation numbers. The June data was announced with an overall inflation rate of 9.1% and a core inflation rate of 5.9%. The inflation numbers have not been this high since the early 1980's.

The last week of July also included two substantive announcements that had a material impact on the capital markets. The Federal Reserve Board (the "Fed") through the Federal Open Market Committee ("FOMC") announced an increase in the target for the Fed Funds rate of 75 basis points. Immediately following on that announcement, economic data was released indicating a decline in U.S. Gross Domestic Product ("GDP") of 0.9% for the second quarter. This was after a decline of 1.6% in the first quarter. Under the older, simpler metric that would mean that the U.S. is in a recession. However, going back a few years, the National Bureau of Economic Research ("NBER"), the body that officially declares whether or not the country is in a recession, decided that the metric was prone to false positive and false negative designations. The NBER now looks at a dozen or so individual economic statistics. Altogether there is substantial overlap between the new and old method. For now it looks like those metrics will not lead to a designation of a recession quite yet. The various statistics are published monthly, so a designation of a recession could still come in the next couple months if the economy does not turn back around.



The current inflationary environment began at the end of 2021, driven by supply chain issues that began in 2020 with the COVID-19 Pandemic, and were exacerbated by multiple issues emanating from the Russian invasion of the Ukraine, principal among the latter was a dramatic uptick in oil prices. The Fed began unwinding its accomodative policies at the end of 2021 and in 2022 has been aggressively raising interest rates. This increase has led most analysts to consider the likelihood of a global recession in the next two years as being relatively high.

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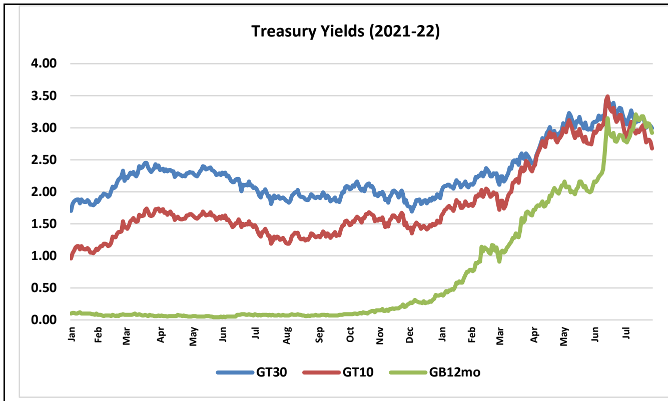
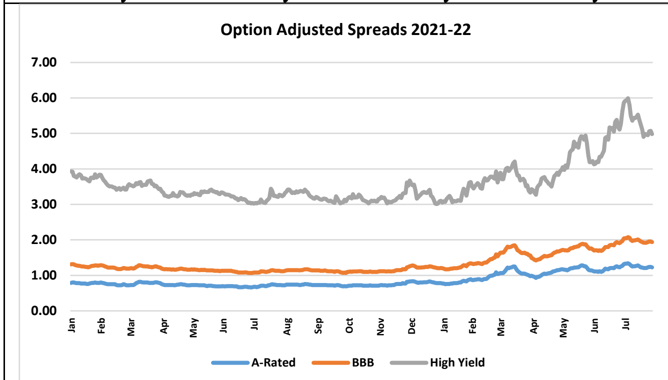
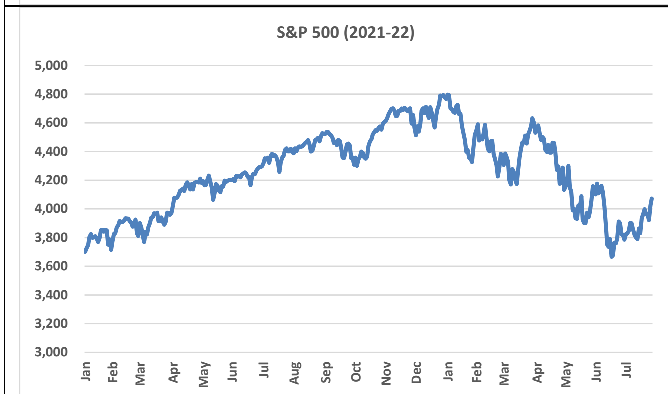


The Fed took extraordinary actions in 2020 to reduce interest rates. At the end of 2021, the Fed announced that it would begin unwinding these accomodative policies to combat high inflation rates. Such actions included several substantial rate increases since the beginning of 2022. With the latest announcement, the Fed has raised the target rate for Fed Funds by 225 basis points. The Fed also began unwinding its balance sheet, which had grown to nearly $10 trillion in 2020. This latter effort is expected to be very gradual to avoid a significant market impact.

Efforts to raise longer term interest rates through asset sales have been offset by other market forces that are concerned about and expecting a recession. This has led to a flattening of the curve between the one-year, ten-year and thirty-year Treasury yields. While the one-year Treasury yield has risen by 250 basis points in 2022, the ten- and thirty year Treasury yields have risen only 120 and 110 basis points, respectively. This results in a modestly inverted yield curve beyond the one-year Treasury.



Corporate Bond spreads have generally widened since the beginning of 2022 as investors are expressing concerns over prospective defaults that may result from a recession in the next year or two. This has been most noted in below investment grade bonds that have widened by 200 basis points and also results in an increasing differential in spreads and yields between rating qualities. Increasing interest rates and widening spreads will impact the fair market value of Bonds held.



Equity markets, as exemplified by the S&P 500, recovered rapidly at the end of 2020 and into 2021. In 2022, the S&P 500 declined by as much as 20% at one point, which is usually referred to as a "bear market". Investors have grown concerned about the likelihood of a recession which will impact earnings. Higher interest rates also impacts valuations. Since the end of 2021, the estimated price-earning multiple of the S&P 500 has declined to 19.4 from a high of nearly 40.0 in December 2020.

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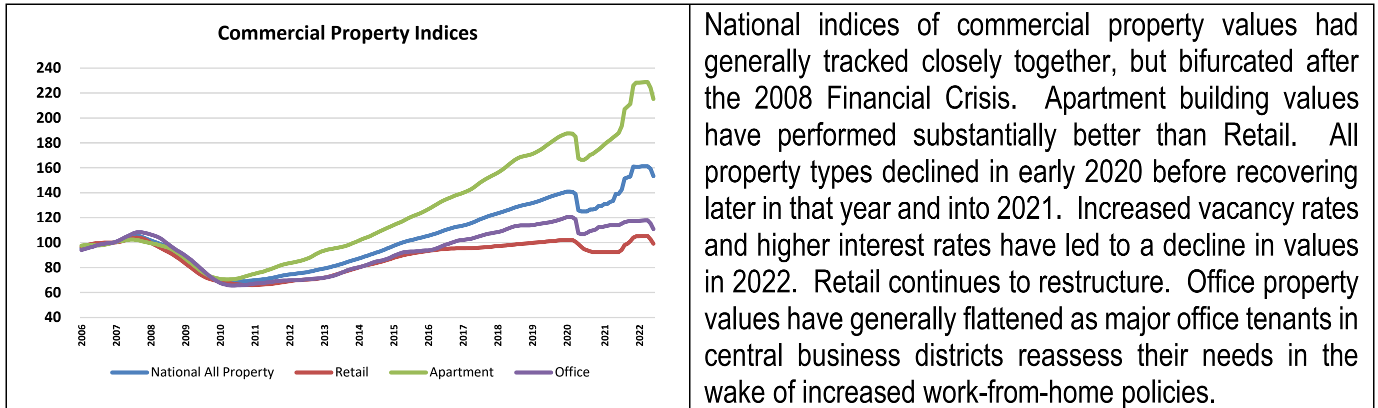

National indices of commercial property values had generally tracked closely together, but bifurcated after the 2008 Financial Crisis. Apartment building values have performed substantially better than Retail. All property types declined in early 2020 before recovering later in that year and into 2021. Increased vacancy rates and higher interest rates have led to a decline in values in 2022. Retail continues to restructure. Office property values have generally flattened as major office tenants in central business districts reassess their needs in the wake of increased work-from-home policies.

Closing Thoughts

Market volatility has returned in 2022 and is expected to continue for the near term. Rising interest rates will improve new money rates on fixed income investments going forward, but will also present new challenges to insurers. In this environment we note that U.S. insurers have generally increased the risk profile of their investment portfolios. While a substantial degree of that increased risk is among the larger companies within each insurer type, smaller companies have also modestly increased their risk profiles. This trend is reflected in many of the individual metrics, but should also be considered as a whole.

A substantive question to be addressed is, have the different sized organizations also made significant enough improvements in their risk control and management systems to reflect that increased risk? Investment portfolios that are more susceptible to market volatility and are less liquid require different levels of experience and understanding within senior management and on the Boards of companies. Reporting and portfolio tracking also have to be more robust to understand the impact of the increased volatility on holdings. Some key questions to consider include the following: Are investment guidelines appropriately structured? Is compliance monitoring, including structures for tracking the activities of investment managers, up to the task?

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