Market Briefing

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

Date: March 11, 2020

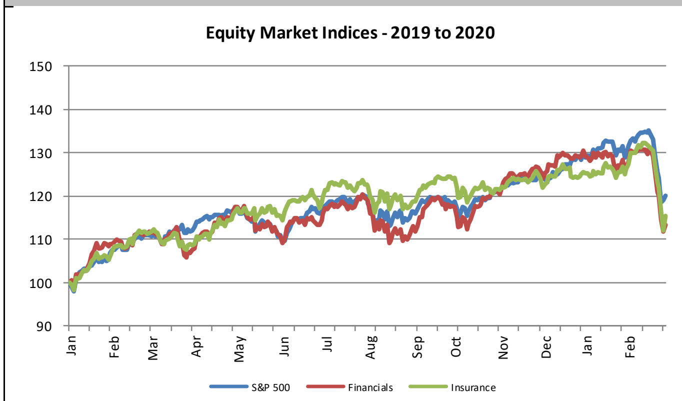
Subject: Asset Valuations in a Volatile and Uncertain Market

Introduction: There is an inherent risk in presenting any cogent ideas about the market in an environment as what we have been experiencing in recent weeks. At any given moment, the data I am relying on may be substantially stale as the Dow Industrials, which is the most commonly touted number, may be up a 1,000 points or down 1,200 points. However, that kind of environment is also exactly when such a discussion is most relevant. To pick a simple point in time, the graphs included will be almost entirely as of the end of February, but I will endeavor to provide some context when that particular data is not indicative of the most recent condition as I am typing.

As I am sure everyone is aware, every market that insurers and insurance regulators may be concerned about, and a few that they are not, are in turmoil. While the trigger for this has been the serious concerns over the Coronavirus, the markets have been headed in this direction for the last few months and were almost looking for such a trigger. Before I begin, other significant factors on the horizon have been: the Presidential election, Brexit, the transition from LIBOR, (already) weakening GDP growth forecasts, ongoing trade disputes, and growing political instability in some regions of the globe.

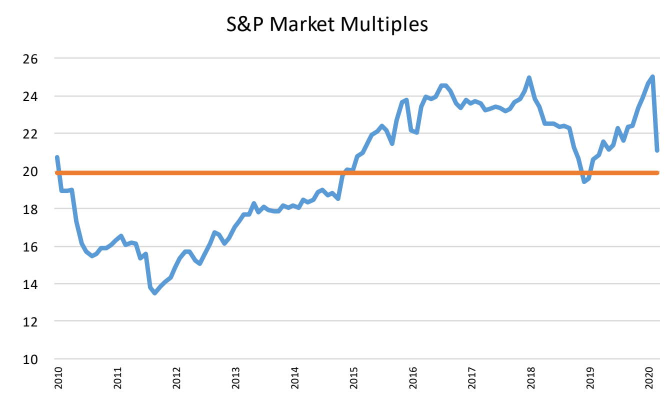
The financial statements of insurers are also now being submitted electronically to the NAIC. Life and P&C companies are generally due in March, while companies that report on the Health Blank have until April. Even though this market turmoil is occurring in 2020, it may have an impact on the financial statements for 2019 if the companies and their auditors consider it relevant.

Market Volatility

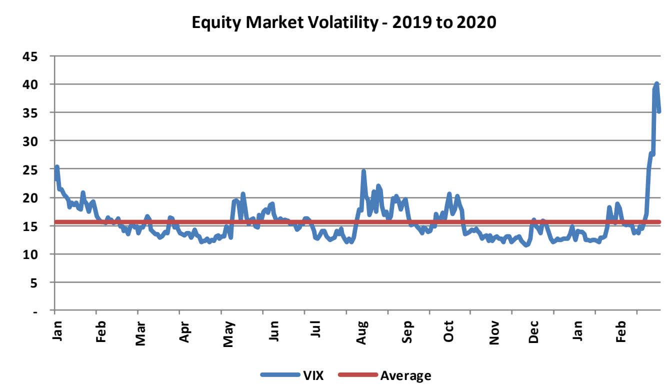


Global equity markets have been going through a level of volatility that has not been seen at least since the financial crisis of 2008. With another significant drop on March 9th, the S&P 500 is beyond what is considered a correction (down 10% from a recent peak) and is moving towards a bear market (down 20%). Overall the Financial Sector in general and the Insurance Industry are pacing with the S&P 500. This began to diverge in the last few weeks as Financials, including Insurance, are more vulnerable to longer term earnings pressure from lower interest rates than the market in general.

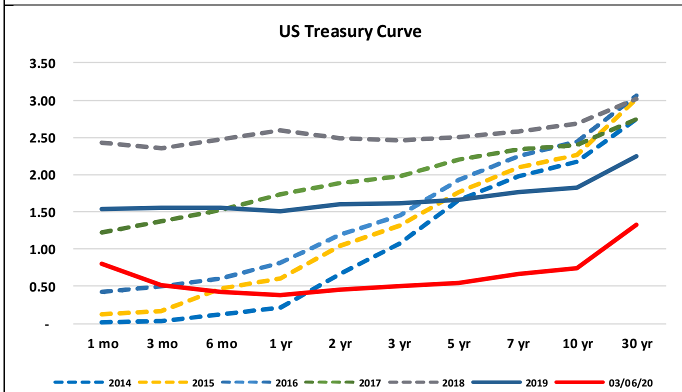
The S&P 500 was up nearly 30% in 2019 and, at least as of this writing, has not given back all of those gains. The Life industry's exposure to equity markets is relatively small at about 1% of invested assets. The P&C industry is more heavily exposed at about 20%. Some of the heavier industry wide weighting to equities for P&C is driven by the larger companies among that insurer type. However, even taking that out of the calculation leaves a significant exposure of about 10% of invested assets.



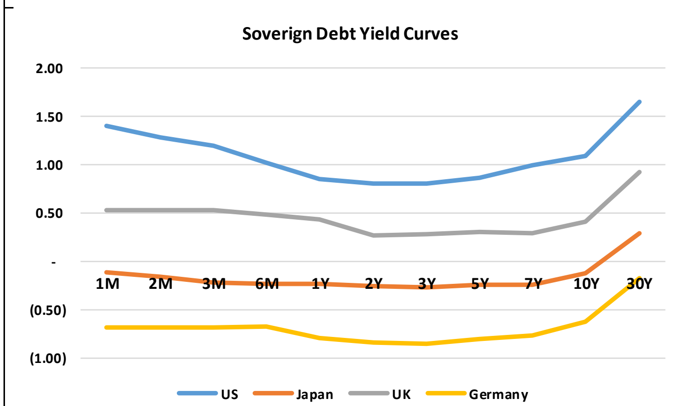
Without any suggestion that the current turmoil in the equity markets is not of significant consequence, it is also noteworthy that just prior to the market downturn, price earnings multiples had recovered from their slide back in 2018 and were hitting a peak again at more than 25 times earnings. This higher P/E multiple seemed counterintuitive to slower earnings growth in recent quarters and a weaker economy going forward. As it stands as of now, the multiple is still above the ten year average.



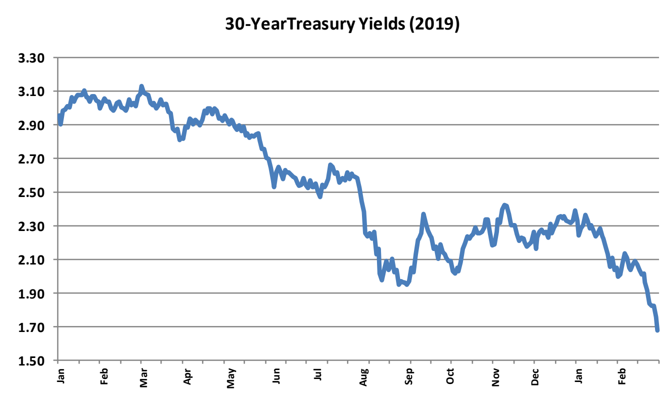
The S&P Volatility Index (VIX) reflects options prices for the S&P 500 index and has been relatively quiet for the last year. Given the nature of the index, it is not surprising to see short term spikes in equity market volatility. Unlike some media pundits, I do not see the VIX as a "fear index". It is a measure of uncertainty, and in this case concern about the future direction of the market. Where this potentially has real relevance is in the pricing of options and other derivatives that the insurance industry uses to hedge their equity risk. Market volatility is an important input into pricing and a higher data point could mean more expensive hedging costs. This could also have a significant impact on the value of existing options held. It is important to note that in markets such as this, it is not uncommon for cash markets to diverge from derivatives markets.



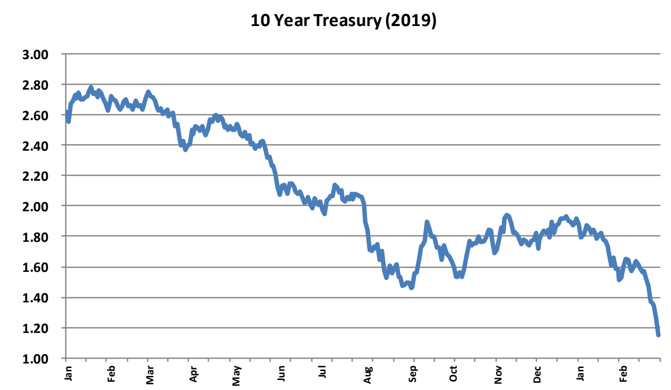
More significant for insurers, because their investment portfolios are heavily skewed to bonds and other fixed income investments, are market conditions for interest rates and credit spreads. The general trend in recent years has been a flattening of the yield curve as concerns about the strength of the economy have grown. Recent events have led to the entire yield curve shifting downwards, even before the Fed decided to lower its benchmark targets for the Fed Funds Rate.



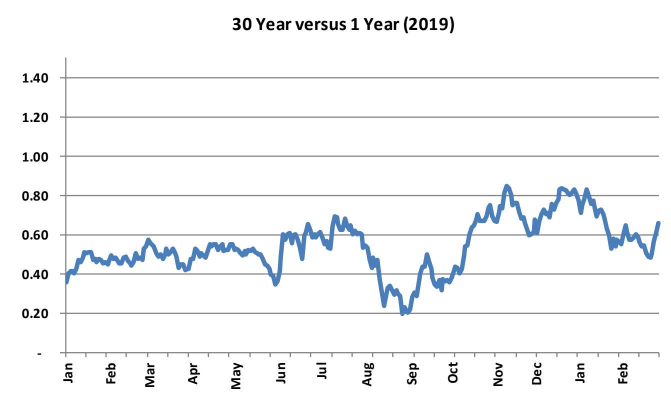
The blue US line in this graph reflects levels as of end of February, and as previously noted has declined further across the entire yield curve since then. As it continues along that path, it moves closer to the yield curves for Japan and Germany. Those sovereign debt yields are actually negative for every maturity point up until the longest maturity, and are reflective of very slow growth economies where central banks have taken extreme measures, largely unsuccessful, at increasing growth through monetary policy.



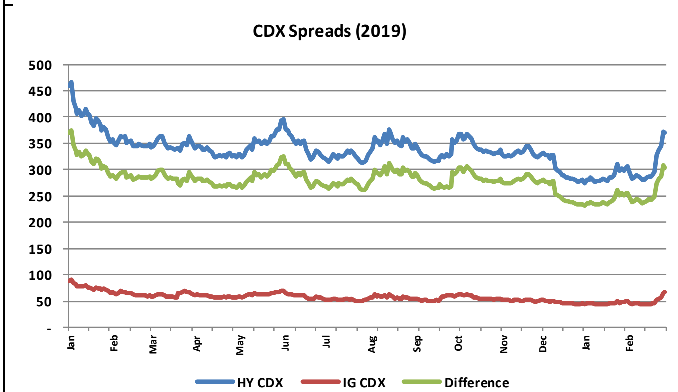
The yield on the 30-year Treasury, with some bumps along the way, has been in general decline since 2017. Post the data depicted in this graph, yields on the 30-year actually dropped briefly below 1.0%. With the longer duration of these bonds, the interest rate volatility can be extreme, which obviously impacts not just Treasury issues but also corporate issues with long maturities. The decline in yields benefits the fair value of existing holdings, but new investments made of longer dated bonds will be vulnerable to fair value declines when interest rates rise.



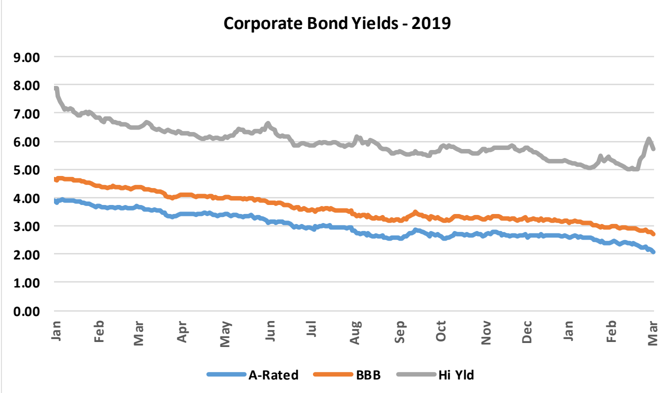
As noted, the attached graph is only through the end of February. Since then, the yield on the 10-year Treasury has dropped below 1.0% and is around 0.5%. The last time this benchmark bond yield dropped below 1.0% was in the mid-1950's. What has a been a steady decline in yields on longer term bonds can have a significant impact on the overall portfolio yield, as maturing bonds with higher coupons are reinvested at current market yields. The impact of lower reinvestment yields had softened as so much of insurers current holdings were already investments made in a lower yielding environment. However, with a further drop in yields, a more significant negative impact on portfolio yields may return.



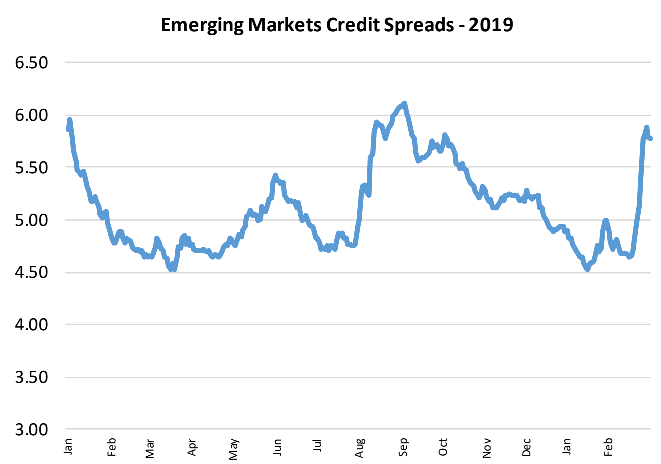
While the difference between the 30-year Treasury and the 1-year Treasury is slightly positive, as is the other frequently watched differential between the 10-year and 3-month Treasuries, the Treasury yield curve is negative sloping in different parts and has been shifting back and forth. The overall profile is concerning, (1) because this reflects the market's concerns about the economy going forward, and (2) means that the insurance industry's focus on longer duration investments to match liabilities does not result in any material benefit in investment yields.



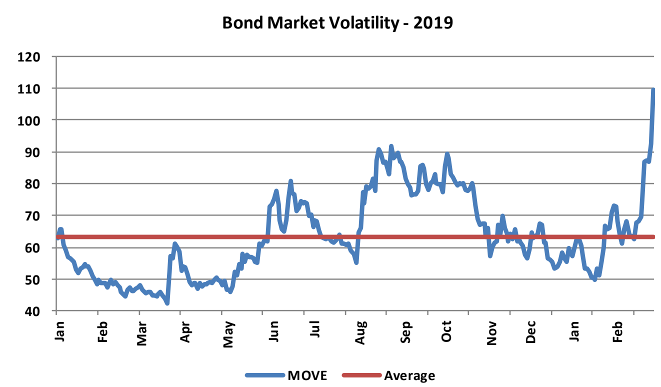
Recent days have seen some widening in credit spreads, with the degree of widening depending on credit quality. The CDX is a credit default swap for an index of corporate investment grade or below investment grade bonds. As of this writing, the CDX High Yield Index is up around 550 basis points. Even with the recent widening, spreads remain relatively tight, especially for investment grade bonds. This can be explained by the layered market reaction thus far. As the market has continued pulling back from equities (see graph later on mutual funds flows), a significant portion of that cash has gone into the bond market, both for "risk-free" Treasuries and for corporate bonds.



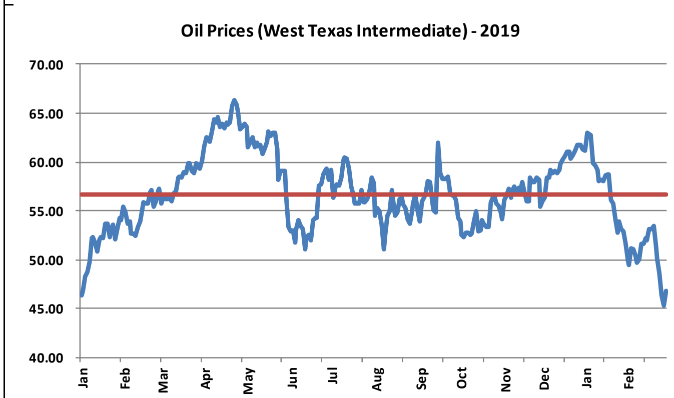
Painting a similar picture to the CDX spread data are benchmark corporate bond index yields for single-A, BBB-rated, and below investment grade bonds. While there has been some widening of credit spreads for investment grade credits, this has been entirely offset by a decline in Treasury yields, such that the yield on corporate bonds has continued to decline. This is not the case for below investment grade, otherwise known as high yield. The profile for the investment grade markets is concerning since that has historically been the sweet spot for insurers. While the decline in yields may be considered a positive for fair values of their existing holdings, it is a significant negative for the investment of new cash flows. The market for these investments yields only between 2.0% and 3.0%.



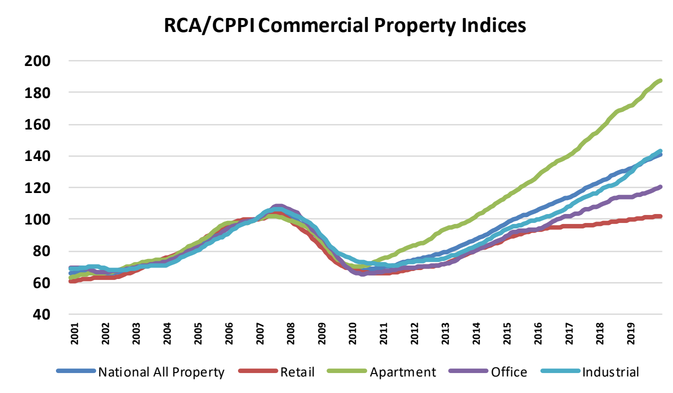
Emerging Markets bonds are for the most part below investment grade. Even for those that are investment grade, they tend to trade wider than domestic issues given that they are viewed as being subject to more volatility due to uncertain economies and possible currency issues. This is one of the markets where investors including insurers have from time to time reached to find higher yields. As a "cusp" market, it is also one where investors tend to exit, broadly selling their holdings, at the first real sign of problems. This results in the volatility in spreads since the beginning of 2019 and the spike in recent days.

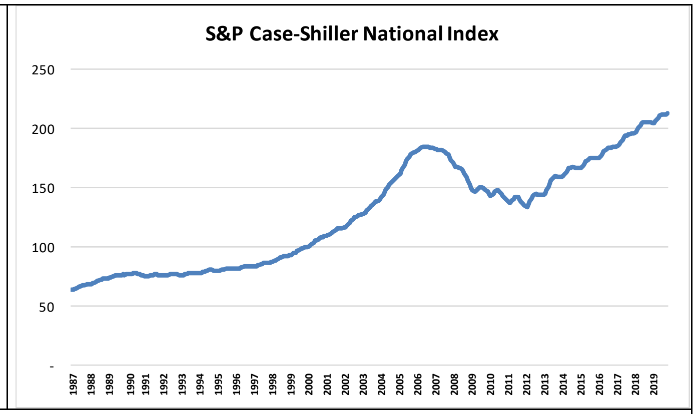


Bond market volatility, even before recent market events, were seeing occasional upticks and were already higher in January and February of 2020. The Merrill Lynch MOVE index is similar to the S&P 500 equity market VIX index. As noted with the VIX, even though volatility should not be a substantive concern for the insurance industry's holdings of bonds, it quite possibly will have a material impact on valuations of certain of its derivatives positions.

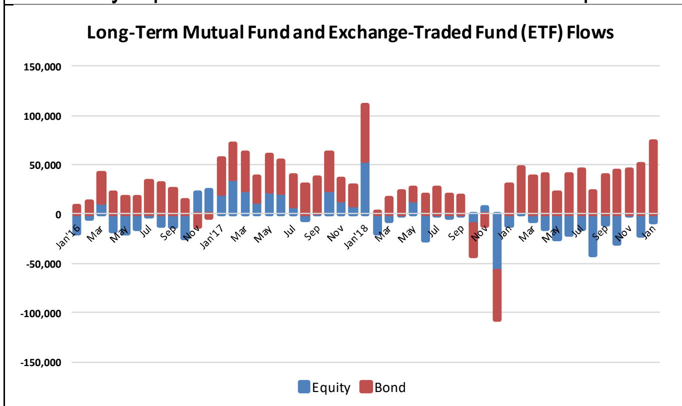


Following the graph to the right, oil prices took an additional large step downward on March 9th as Russia walked away from any agreement with OPEC to stem production to reflect lower demand. This drove OPEC to actually announce an increase in production. Prices briefly dropped below $30 per barrel and are now in the low to mid $30 range. This will severely impact the Energy sector which had not totally recovered from the substantial decline in prices in 2014 and 2015.



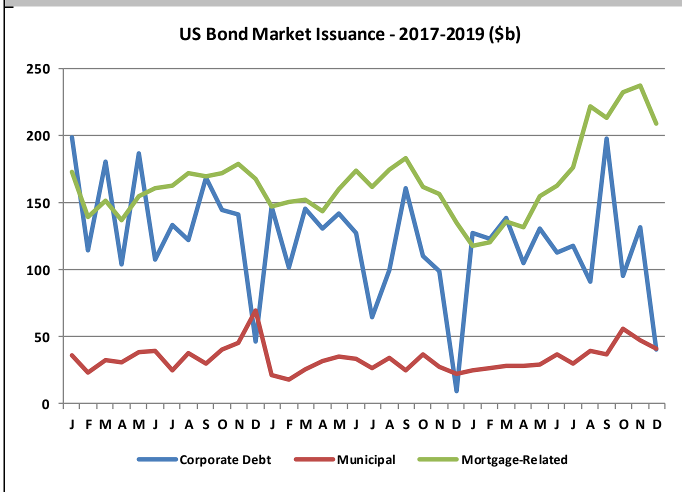


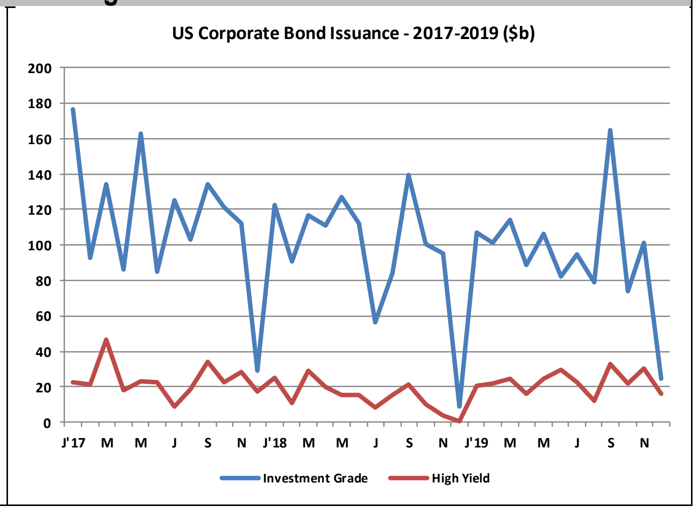
Data on real estate values, both for commercial and residential real estate, is not as current. The above graphs only take us to the end of 2019 and are not reflective of current market turmoil. Any impact may take months to be realized. Nonetheless, there is one data point worth noting even going into the end of 2019. As has been mentioned in past Market Briefings, the differential in national index values for the Retail sector (the red line in the graph on the left) with other property types, especially apartment is widening. Not shown in the left graph is lodging, which is obviously a particular area of concern with the impact of the coronavirus on travel.

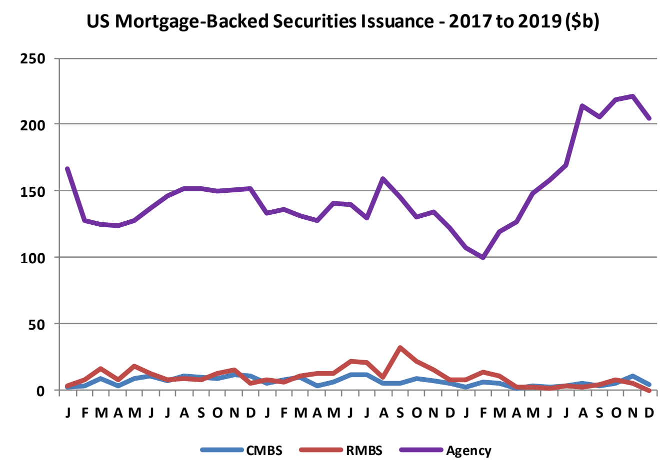


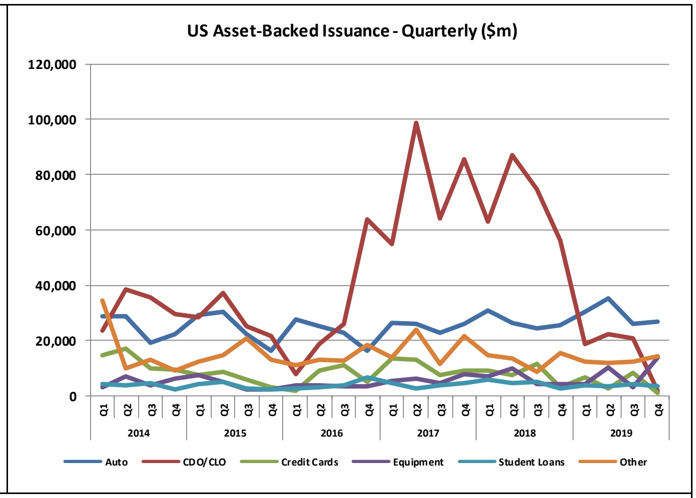
Mutual funds flows, including exchange-traded funds, can be a useful indicator of investor sentiment. It may be particularly informative as it should exclude any activity than can be attributed to leveraged investors like hedge funds. The addition of hedge and other private asset manager fund activity has been known to obscure the data given their leveraged and technical trading. The data on mutual funds showed in 2019 a signficant recovery in overall inflows, but that was entirely on the bond side, whereas equity funds were net outflows.

Market Issuance through 2019









While Agency issuance of Mortgage-Backed securities saw a degree of resurgence in 2019, Non-Agency Mortgage-Backed Securities, both RMBS and CMBS continue at very low levels, far below what they were prior to the financial crisis. Especially noteworthy in this data is that CDO/CLO issuance has been declining since the middle of 2018 and dropped to virtually zero in the last quarter of 2019.

Not Even Close to The Final Word? We are quite obviously in a period of uncertainty at this time. The full extent of the impact of the coronavirus on the economy and on the markets will not be fully understood, likely for some time. And as noted in the introduction, this is not the only source of uncertainty here today or on the horizon. However, taking the current market environment as a lead, and with financial statements being finalized and submitted by US insurers, there are some things that should come immediately to mind for regulators, and be part of their discussion with insurers.

With the driver being the Coronavirus, there is no doubt that there are several areas within an insurer's Own Risk and Solvency Assessment (ORSA), especially stress testing components, that should be carefully considered. From the perspective of this Market Briefing, that should include the impact on invested assets. In addition to any overall review within the context of the ORSA, there are specific aspects that are worthy of additional focus at this time.

1. The impact on fair values on invested assets, not just on those assets that need to be carried at fair value or the lower of cost or fair value. While equities may be on the top of most people's minds, other invested assets are also likely to suffer. This includes many investments reported on Schedule BA, like private equity funds, that are equity related, below investment grade bonds, certain structured securities like CLOs, other cuspy assets like emerging markets bonds.
2. The impact on hedging strategies and derivatives valuations.
3. A focus on exposure to specific sectors that are being especially impacted: (a) those that are travel and leisure related, (b) the energy sector, (c) the financial sector (d) global manufacturers that will be facing supply line issues.
4. The impact of even lower investment yields for the foreseeable future on overall portfolio yields.
5. Potential credit issues, not just for actual defaults but also downgrades. This should include the potential for downgrades from investment grade to below investment grade.
6. The impact on prepayments from RMBS.
7. How all of the above impacts liquidity needs and sources.