Mesirow

Market Commentary

Quarter-end review

As current events continue to quickly evolve, our hearts and thoughts remain with the families across the globe that continue to be impacted by COVID-19. At Mesirow, we continue to focus on the safety of our employees and their families, our clients, our business partners and the communities in which we operate. As we move into a new year, one with the promise of effective vaccines and new therapeutics, we also continue to serve the financial needs and wellbeing of all our clients.

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Investors experienced a 2020 remarkable for its volatility, driven by sheer panic, "locked" bond markets and dramatic (and effective) Federal Reserve Board intervention. The power of the Fed balance sheet tamed the markets and led to a springtime resurgence of investor confidence that has continued through to year end. As we write, the S&P 500[1] has returned + 14% YTD while 10-year Treasuries and municipal bonds returned approximately: UST10: + 10.6%[2]; muni AAA index +11.4%.[2]

Investors have apparently left their March fears behind and continue to pour cash into markets that the Efficient Market Theory tells us are priced to perfection.

All the while the US waits: for a vaccine rollout requiring 662,000,000 patient doses (331mm US citizens x 2 inoculations) as COVID-19 continues to mutate (note UK version) ; a Georgia Senate runoff on January 5, 2021 that will determine control of the Senate; a "rational" resolution and implementation of Brexit; COVID-19 stimulus that heals our damaged economy; a smooth Presidential transition and, not least in enlightened self-interest, an equitable plan to distribute vaccine relief around the world, including our disadvantaged global neighbors. As we look through the data below, that is a lot of risk to overlook in "perfection" valuations...

Let's walk through the data metrics that Mesirow uses to measure and price risk. We believe our metrics suggest that both taxable and tax-exempt markets are mispricing credit risk and over-looking the potential sources of volatility noted above.

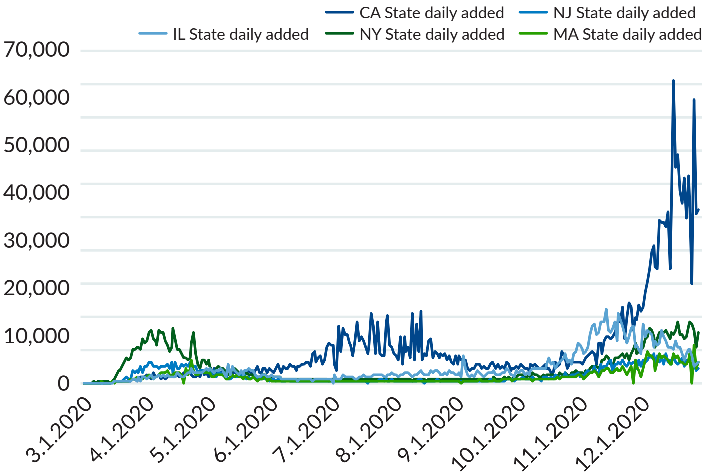
COVID-19

We have been quantitatively graphing the COVID-19 pandemic since its earliest signals in Wuhan, Hubei Province. We believe that the team's ability to source and understand local Chinese data sources, and to analyze them at the height of the March panic, gave Mesirow and our clients a considerable early advantage in understanding the enormous potential of the pandemic to disrupt both daily life and financial markets around the world.

Chart 1 highlights the clinical case load of COVID-19 on five hard hit and high tax states that we have been following as bellwethers throughout this crisis. Do not be misled by the scale of this graph. While California and New York stand out, Illinois, Massachusetts and New Jersey are under extreme credit stress that is not apparent in Massachusetts and New Jersey current rating agency credit ratings.

We are also concerned about the demand for capital by distressed State and Local governments post-COVID-19. For context, bear in mind that the Municipal market represents approximately $3.9T outstanding, in 2020 new issuance the year alone may reach as much as $470B.

CHART 1: **HIGH TAX STATE COVID-19 CASES**



Source: Bloomberg.

Liquidity

Chart 2 illustrates a deeply granular forecast by Mesirow research of the external capital needs of six states suffering severe economic and fiscal dislocation from COVID-19. Note that the politics around Federal COVID-19 stimulus relief directly affect the cash calculations of these heavily Democratic State governments (watch that 1.5.21 Georgia Senate race).

All conscientious market watchers are aware of the fiscal stress faced by Illinois, New York and New Jersey. We include California in this basket for three reasons:

1) California has the most volatile state revenue structure of the 50 states.

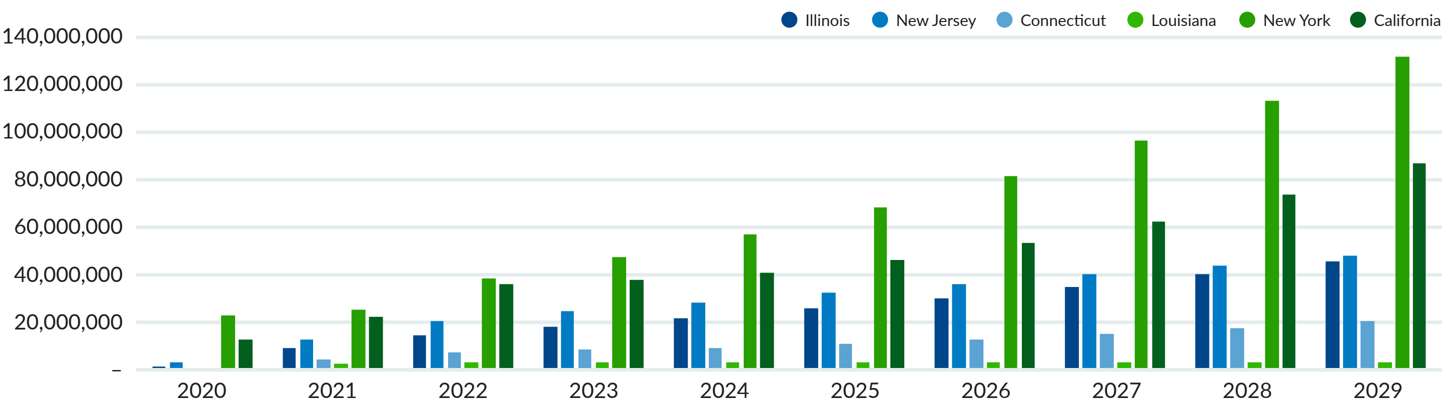
2) California has the most concentrated revenue structure (heavily weighted toward personal income with Proposition 13 distortions reducing residential property tax revenues).

3) The severity of the COVID-19 pandemic in California (see Chart 1) bears continuing scrutiny.

Please review this chart in the context of scale and of time. Illinois' stresses are happening in real time; New York and New Jersey are accessing overvalued markets now, in real time to buy liquidity (and time) cheaply. California's fiscal stresses will play out over time, in the context of eventual recession pressure.

To restate: Final 2020 municipal issuance will be in the range of $450-475B. In our "Deep V Recovery" scenario model, the forecasted cumulative deficits of these SIX states (IL, NJ, CT, LA, NY, CA) could reach: in 2 Years: $73B; in 5 Years: $157.7B; in 10 Years: $334B. These forecasts are softened by the current low rate structure. It's hard to argue that the market has priced in even a partial realization of these state

CHART 2: **STRESS STATE FINANCING REQUIREMENTS**



Source: Mesirow Research.

deficits, to say nothing of local government capital needs and various grand infrastructure proposals that are regularly floated by both political parties.

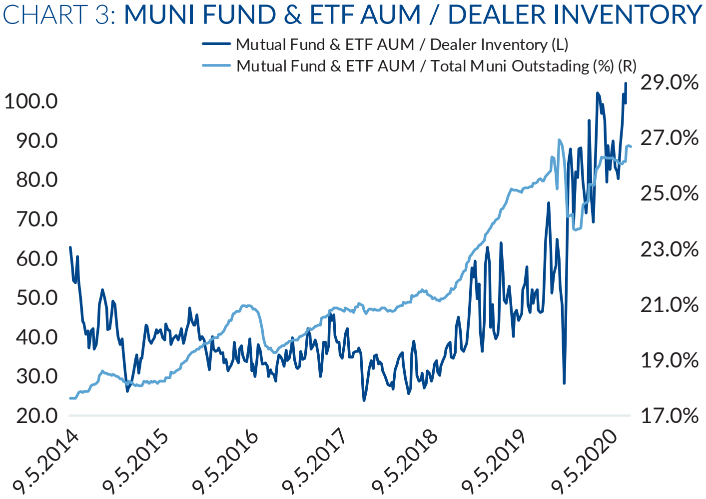
Chart 3 illustrates the relationship of Available Dealer Inventory (as a proxy for trading liquidity) to assets under management at mutual fund and ETF fund complexes. This chart raises two concerns:

1) Fund complex assets (light blue line-right scale), most of which offer shareholders DAILY liquidity, are at a peak as a percentage of the Municipal market. Important question: are institutional fund complexes representing 27% of the $3.9T municipal market short a daily put to retail investors; where is the liquid capital to fund that put?

2) The relationship between these institutional Assets Under Management and Dealer inventories (navy line-left scale) is at a peak of 100 X. One more time; AUMs are approximately one hundred times our proxy for dealer liquidity within months of the March 2020 market freeze-up.[3]

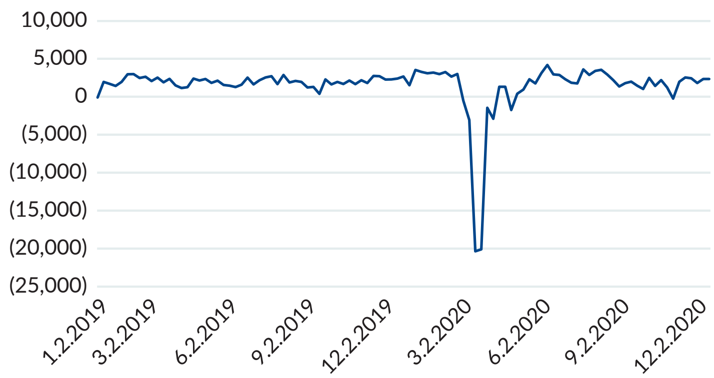
These structural risks have largely been driven (and masked) by the strong daily flows into municipal mutual fund complexes. This market historically conflates retail fund flows to institutional mangers, which can stop on a dime (does anyone remember March 2020?), with real structural market liquidity. Chart 4 is a classic example of "unrealized risk."

CHART 3: **MUNI FUND & ETF AUM / DEALER INVENTORY**



Source: Federal Reserve Bank, EPFR.

CHART 4: **ICI MUNI FUND FLOWS**

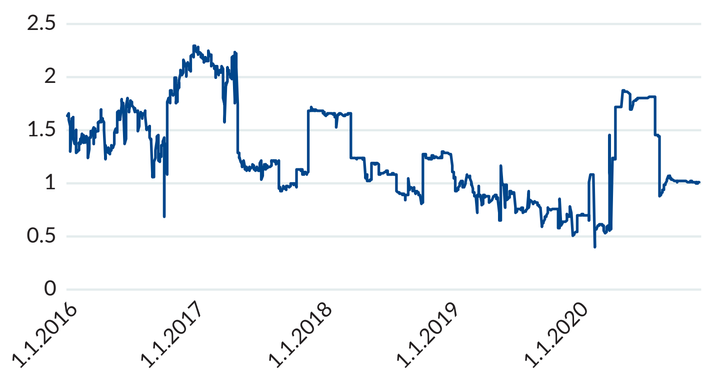


Source: ICI.

Credit spreads

Please review Chart 5 (Municipal BBB Revenue Bond spreads to AAA) and Chart 6 (CDX Investment Grade spreads). You will notice that in both Municipal and Taxable markets, the right side of each graph show a re-tracing of the spread widening on March 2020. The Muni market is anecdotally trading tighter than the graph suggests. Within ten months of a market liquidity crisis, in the middle of a global pandemic, with credit defaults rising, our markets are priced as if the crisis never happened and that the Fed's March intervention to unlock frozen markets was a dream.

CHART 5: **BBB REVENUE BOND SPREAD TO AAA (%)**



Source: Bloomberg.

CHART 6: **CDX GENERIC IG INDEX SPREAD (BP)**

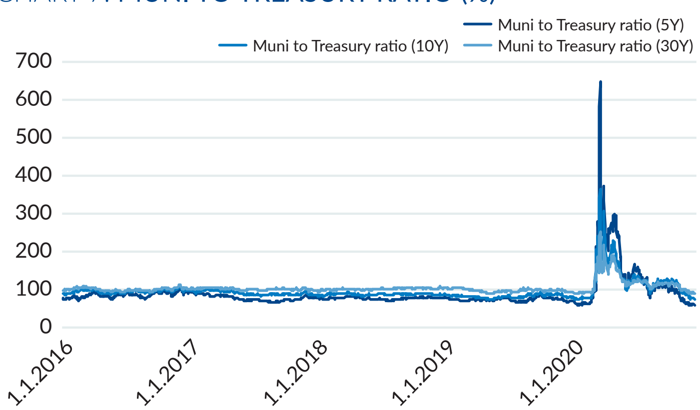
Source: Bloomberg.

Municipal vs Treasury ratios

Municipal bonds are trading extraordinarily rich to equivalent taxable instruments. Chart 7 illustrates the violence of the blow-out in Municipal/Treasury ratios in March 2020. We are back at the "tights" as if nothing has happened, other than positive fund flows, as the graph illustrates.

On December 23, 2020 AAA Municipals were yielding 60% of Treasuries in 2025, 77% in 2030 and 84% in 2050 (source MMD).

CHART 7: **MUNI TO TREASURY RATIO (%)**



Source: Bloomberg.

The Municipal market paradox of: 1) declining absolute rates, very tight credit spread and fear of rising State taxes set against a background of 2) the economic and fiscal stresses of the COVID-19 pandemic has driven investors to pursue the higher returns offered in the Taxable Municipal market. Mesirow recognized this trend two years ago and has built a trading capability that seamlessly covers both taxable and tax-exempt securities. Taxable Munis represented more than 33% of issuance at more than $170B (2 x 2019's taxable issuance).

Note that sophisticated institutional investors are watching the Georgia election closely. Most Institutional market participants expect a Democratic Senate would give the new administration the ability to re-visit corporate tax rates, thus potentially reducing the relative value of Taxable Munis.

Mesirow serves our customers by searching for value across the capital markets, from misvalued Treasury and Agency securities, to a full array of Municipal coverage including Public Finance and aggressive Competitive Underwriting, to a deeply creative structured finance practice that includes proprietary products including Credit Tenant Lease and Sale-Leaseback vehicles.

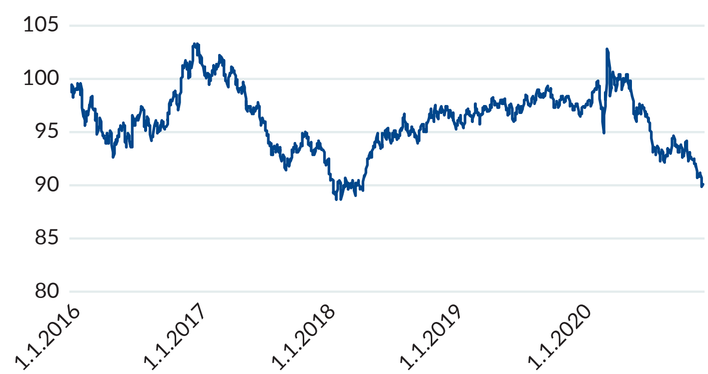
Interest rates and currency risk

We could write a book on the risks inherent in the current UST yield curve and the structure of rates. The risks, both obvious and unknown, seem to have decoupled from the soaring domestic equity markets. "Don't fight the Fed" seems to be the catch-phrase that turned into a lullaby for the bond market in 4Q2020. This will end...

Meanwhile the USD continues to weaken as our structural deficits grow. The CBO estimated a Federal deficit of $3.1T bringing the National debt to approximately $27T. COVID-19 relief packages, while necessary, increase this problem.

Note the US Dollar Index below.

CHART 8: **U.S. DOLLAR INDEX**



Source: Bloomberg.

Summary

In this note we consider the state of the capital markets at year end with caution, substituting data for "irrational exuberance". We call out the following concerns:

- The continuing economic uncertainty created by the COVID-19 pandemic
- The political uncertainties for investors raised by the Georgia Senate election 1.5.21
- The practical and geo-political risks of vaccine and therapeutics distribution
- The political challenges to COVID-19 relief that are highlighted daily in Washington and State Capitals in this polarized political environment, as governments struggle to overcome partisan interests and respond effectively to the COVID-19 crisis
- The fiscal stresses that the pandemic has placed on state and local governments; especially those weakened by years of poor fiscal and pension management
- The disproportionate stress placed on "high-tax/high-cost" urban centers and the potential long-term political and demographic fallout thereof
- The retail investor's fear of increased taxes, especially in high-tax populous states, and the subsequent effect of credit spread compression and expensive tax-exempt ratios driving value out of the over-extended tax-exempt market

Mesirow has focused on discipline, data and the opportunistic search for fundamental value throughout 2020. This thoughtful caution was rewarded in 2020 and we expect the same reward for discipline in 2021.

Mesirow is a partnership in our ninth decade. We always put the best interests of our highly valued clients first and then advise and support them accordingly.

We have prioritized a thoughtful, targeted use of our own firm capital on behalf of our clients, recognizing their need for liquidity. We always mindfully differentiate between retail fund flows and REAL structural market liquidity.

We have also been thoughtful about credit quality throughout 2020, recognizing that this is too treacherous an environment to rely on rating agency responsiveness.

We have followed the COVID-19 pandemic from its earliest appearance in Wuhan as analysts, investors and as citizens living in a uniquely challenging moment of our history.

With gratitude, we join in celebrating the brilliance of our scientific community and the commitment and dedication of our front-line healthcare providers.

We wish you, your family and your neighbors a safe, healthy and prosperous 2021.

About Mesirow

Mesirow is an independent, employee-owned financial services firm founded in 1937. Headquartered in Chicago, with offices around the world, we serve clients through a personal, custom approach to reaching financial goals and acting as a force for social good. With capabilities spanning Global Investment Management, Capital Markets & Investment Banking, and Advisory Services, we invest in what matters: our clients, our communities and our culture. To learn more, visit mesirow.com and follow us on LinkedIn.

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1. The S&P 500 Index or Standard & Poor's 500 Index is a market-capitalization-weighted index of the 500 largest U.S. publicly traded companies. The index is widely regarded as the best gauge of large-cap U.S. equities.

2. Mesirow calculation 12.23.2020.

3. Dealer inventories as reported by the Fed should be understood both strategically and tactically. Strategically, our AUM chart illustrates scale of the structural liquidity risks of a potential capital imbalance. Tactically, when "Street" traders are "light", some consider this a bullish technical short-term indicator. Both quantitative data and experienced judgment are situationally required to parse the signals.