

January 2020 – "Introducing the Green SWAN"

Munis began 2020 the way they left off in 2019, with high demand, low supply, and solid credit quality. Taxable issuance continues to grow, as issuers feel borrowing at taxable rates will provide them long-term cost savings, versus waiting a few years and paying tax-exempt rates. MainLine remains constructive on munis but, given our 2020 outlook, the noise of the fall election is getting louder thanks to the lowa caucus "complications" and the never-ending daily news of climate change risk. We wonder when munis will finally stumble.

In this month's credit report, we detail concerns with climate change and its potential impact on the municipal market. We also discuss our process to help ensure your Sleep Well at Night portfolio will be prepared if and when climate changes occur. I guess you could say MainLine is planning to add a little Green to your SWAN portfolio.



Muni Market Review

A strong US Treasury rally helped move muni yields lower in January. By month end, munis had underperformed, but versus historical relationships, they performed well. Munis moved 70% of the US Treasury changes versus the long-term average of 60%. January highlights are as follows:

- Muni yields are lower across the curve from 25 to 29 bps.
- Taxable yields were lower across the curve from 38 to 41 bps.
- Muni inflows remain strong with close to \$12 billion YTD 2020. This is almost twice the amount versus YTD 2019 (\$7.1 billion).
- Supply continues to remain elevated versus history. Details as follows:
 - 2020 year-to-date versus 2018 is up 24% and is flat versus the five-year average.
 - 2020 refunding is up 49% from 2019, with 66% being taxable bonds versus 46% taxable in 2019.

MainLine remains short-term bullish on munis as technicals are strong, credit news is positive and tax-exempt bonds are hard to come by. Stay tuned, the election is already getting interesting with the "complications" in lowa and the everyday commentary on climate change continues.



Market News and Credit Update

According to MMA (Municipal Market Adviser), the raging Australian fires raised the awareness of climate risk in the US municipal market for the first time with questions surrounding some primary issuers whose disclosure of climate risk events were called into question. We feel this is just the beginning for the muni market. Issuers will start being required to disclose climate control risks and their plans to combat it in their preliminary official statement offerings. Investors will then begin to price the quality of these plans and the perceived risks.

The House partially released **a new infrastructure bill to spend \$780 billion** on fixing roads and bridges. Details and a time-line are developing, but it appears to be good for the muni market. Some discussion has been put forth on the possibility of restoring the Build America Bonds and advance refunding for muni issuers, which is music to our ears at MainLine. I guess they have been reading our monthly credit reports in DC.

SIFMA (Securities Industry and Financial Markets Association) has put forth a **request that the SEC not allow the "Proposed Exemption Order".** This would allow a municipal issuer to place bonds directly with purchasers and state registered investment advisors, bypassing the broker/dealer community. This would limit transparency on issuers operations and not require disclosures going forward. SIFMA estimates that 1/3 of the issuers could fall into this "opaque" environment and place muni advisors as direct competitors with the broker/dealer community. MainLine feels anything that limits transparency and disclosure on issuers is a negative for muni investors. We support SIFMA in its request, and feel ultimately it will prevail in placing limits or completely disallowing the "Exemption Order".

Municipal Monthly Credit Review – January 2020: Climate Change and the Muni Market Introducing the Green SWAN?

Unfortunately, it seems most people's opinions on climate change/global warming are aligned with their political affiliation or the news channel they watch. This credit review is not to cite evidence on whether climate change is real or not. However, assuming it is actually happening (even modestly) the impact will be felt on the environment, economy, and society. The ramifications will be significant on the various investment markets around the world, including the safe SWAN (Sleep Well at Night) world of munis. MainLine feels it is time to start turning your **White SWAN green**.





MainLine feels the muni market does not fully understand the impact climate change could have on issuers. As investment managers who buy bonds from 1 to 30 years, we feel the need to consider climate change now and its impact on the pricing value and credit quality when making investment decisions. We also do not feel the risk is 30 years away. There are things that as a society we could be doing now that will impact credit quality today, long before any physical effects of climate change occur. These are what we call "transitional risks" which could create policy changes, new regulations, and operational changes that will effect issuers today.

In this review, MainLine will first discuss the possible changes due to climate change on the world's ecosystem and society as predicted by numerous studies. Then we will take these changes to muniland, consider the physical and transactional risks associated with munis, and *discuss how we tailor our investing to insulate your portfolio from potential volatility down the road*.

Background on the Theory of Climate Change & Global Warming:

Depending on who you listen and talk to, some of the below is already happening because of the average increase in the temperature of the world since the 1800's. In general, the prospects of a warming earth could create the following issues:

- Increased wild fires & mudslides
- Higher temperatures
- Food & water shortages
- Coastal and inland flooding
- More violent, less predictable weather patterns
- Increased political tensions and a decline in living conditions in certain areas

Studies suggest there could be a chain reaction from a minor change in climate today, creating bigger, quicker changes going forward. In other words, the impact of changes may not be linear once they begin. This is why some proponents are demanding action now. A small change today can help keep changes from being too drastic or slow them and make them more manageable. The longer the world waits, the more expensive it will be and the harder it will be to stop a disastrous trend. MainLine also believes you can never underestimate the willpower of humankind and technology.



More specifically, it is predicted that CC will cause the following:

- 1) Increased wild fires and mudslides: Trees are the best carbon monoxide absorbing tools on earth. Increased temperatures dry out foliage, causing larger and more frequent fires. This decreases the number of trees, which allows carbon to build up to a greater degree. Fewer trees also lead to more loose dirt, which create more flooding and subsequent mudslides. This creates more issues through from property and infrastructure destruction and the loss of valuable top soil.
- 2) **Higher temperatures**: Melts ice in the artic, which then releases methane gases, which further creates a greenhouse effect. The increase in sea levels could also drown coastal towns, islands, and other land. Finally, the increase in the ocean temperature will kill coral reefs, other aquatic life, and feeding grounds for fish.
- 3) Extreme weather changes: This means rare weather events in places not accustomed to having them, more intense storms, longer and hotter droughts all with increasing frequency. These changes will cause more infrastructure damage, impair economic activity, and will alter long-term investment commitments, and the work/life ability of certain regions.
- 4) Food and water shortages: An increase in temperatures and degradation of soil will make it harder to grow food. In addition, the food grown will have a lower nutrient content. The world's population is still growing and the demand for food continues to increase. This will create food shortages, along with water shortages in certain areas. While scientists believe there will be enough water to go around, distribution will be both a logistical and political hurdle.
- 5) Increased political tensions and a decrease in living conditions? The inability to get countries to work together to provide resources and limit actions that cause further warming will continue to be a political challenge. Unless unity is achieved, there will be significant negative ramifications. As Americans, we first need to get our Government on the same page.

Why Munis? Why MainLine West?



I am not a scientist, nor do I consider myself a Democrat or Republican. MainLine's responsibility to its valued clients (as an advisor and fund manager for investors seeking long-term, principal safe income) is to be aware and on top of the potential credit ramifications stemming from climate change. This is not a political stance. We view it as a prudent approach and part of our fiduciary responsibility. It is not a vote for Trump, or Bernie; it is simply a vote for long-term

principal protection and good income returns. MainLine feels it is time to add a little **green to your** white SWAN portfolio.



Overview of Climate Change and muni credit research and quality:

MainLine feels a little ahead of the muni market, which currently does not fully differentiate between credits and sectors regarding risks associated with climate change. We feel, at some point, there will be a devaluation in the price of "unfriendly Climate Change bonds" and the creation of a bifurcated market. MainLine feels at this time it can turn your white SWAN green, without an impact to your income level.



Below is an outline of what we will be looking at, going forward, as we research buying and selling bonds for our investors. This is not a complete list, and things will change by issuer/sector. Its purpose is to give our investors a bit of insight into our research process and how we are incorporating climate change.

We see the following sectors and general themes impacted:

1) An issuer's location and demographics. This will include all types of muni sectors and take into account any plans they may have to combat climate change, going forward. More specifically:



Geographic, flooding and sea level risks:

Cities & states located along the Eastern shore, southern shores around Texas, and areas prone to storms and flooding need to be reviewed. This includes the addition of larger and more frequent hurricanes, storms and local industries. Items to review: Will people keep rebuilding and do they have the wealth to do so? Will insurers continue to provide insurance? Will the US Government continue to pay for rebuilding? Will businesses and physical assets relocate? What are the issuer's current plans to prepare for climate change?

Wildfire and mudslide risks:

Do we need to remind anyone how this has become a big issue in California? There are certain areas in the USA that are more vulnerable to disasters and the potential of adverse long-term effects on its demographics. Items to review: How prone is the area to disasters? Will the municipality continue to rebuild and do they have the wealth? Will electric utilities have liability issues? Will businesses and physical assets relocate?



Extreme weather change and impact on local economies and demographics?

Is there an industry that, due to increased temperatures, less water, or other global warming weather ramifications, will struggle and hurt the local economy or any specific services provided? For example, an agricultural region that is prone to increasing temperatures or less water may be impacted and the prospects of jobs and income growth hurt. Will people still be willing to live there? Can the issuer support their debt load and still provide public services?

2) Review electric utilities and their source of energy and its distribution:

The immediate concern is reducing carbon emissions and the prospects for a carbon tariff/tax - and the additional cost needed to do so. Electric utilities that use coal incur higher costs, hurting profitability and debt service coverage. Items to review: Does the utility have ways to offset higher costs of production or have access to renewable energy sources they can turn to? If not, are they actively involved in providing and expanding renewable energy sources into their supply source? Germany has struck a deal to phase out hard coal by 2035. Massive transfers of money from the government to the producers are being provided as compensation. *Is this a blue print for the future in the US?*

3) Review water & sewer utilities for water availability, and it's distribution:

Will the utilities current sources of water remain as inland water disappears? Items to review: Do they have other sources they can turn to make up for any potential shortage in supply or plans to add to it? Alternatively, will they need to seek alternatives, which may be costly and effect their demographic growth of their service region over time?

4) Review transportation bonds and quality/variety of infrastructure:

New bridges and roads will need constructing to sustain increased heat, storms, and other potential natural disasters. The current state of the road system is substandard. Now, imagine these issuers having to redo roads with higher usage standards and the impact on tolls and fees to pay for it. If new emissions standards are required, cities without a form of public transportation could be challenged.



Conclusions:

What specifically is MainLine doing about climate change risk and the municipal portfolios we are managing for you and our Fund investors?

- **New Purchases:** We will review every new bond for climate change risk, not just for today, but also for the foreseeable future. We will consider its expected repayment date and diversification factors in the portfolio, as we make investment decisions. *Principal protection remains top priority.*
- Current Holdings: In your second Semi-Annual report of 2020 (June 30, July 31, or August 31) we will review each of your bonds for climate change risk, share our findings, and advise from there. If we find problems, we may recommend selling or holding the bond depending on the expected repayment date and any plans the issuer has to combat climate change.

The amount of news coverage and opinions since we first started contemplating this risk has exploded. Emphasis on global warming permeated the 2020 Davos Conference and both parties in DC have built their platforms around the issue. Not surprisingly, new issuer disclosure concerns are now being requested by the muni market.

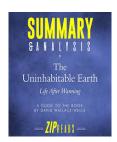
The call for international cooperation and action in 2020 is growing stronger. The call for investors to support "green companies" and not invest in climate unfriendly companies is also growing louder. Once again, the "calls" may not be heard in 2020 by the muni market, but MainLine is heeding the calls today. We feel the time is right to add a little green to your white "Sleep Well at Night" portfolio.





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