MONTHLY REVIEW

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WEST

CAT Bonds = SWANs?

Hurricanes Helena & Milton have brought catastrophe bonds (nicknamed "CAT bonds") back into focus, as they are considered a municipal bond sector. As storm season peaked in October, these bonds became illiquid for a couple of days and are now trading much wider than their initial pricing. Muni bonds that trade according to weather? CAT bonds provide a necessary for the public good service, but as for a "sleep well at night investment", this is open for discussion in this month's MainLine Muni Market Review.

In the month of November, munis moved on from the election and record new issuance to post a solid performance and a respectable year-to-date. How does year-end stack up? Issuance (supply) appears to remain strong; inflows (demand) appear to be in a good positive flow, muni value is fair, muni fear index is high and MainLine feels things will remain constructive for the next 30 days. However, 2025 could be sizing up to be a Category 5 storm.

Muni Market Review

Munis took comfort in the election being over and put in a good month of performance in the face of record new issuance. The Bloomberg Composite indices show munis were up 1.73% for the month, up 2.55% YTD, versus US Treasuries up .78% for the month, 2.15% YTD, and US Corporates up 1.34% for the month, 4.14% YTD. It appears that new issuance will remain strong, muni value is fair, and inflows remain solid. November 2024 highlights were as follows:

- Muni yields were lower from 7 to 25 bps, with taxables only lower by 6 to 7 bps. Year to date, munis are down 2 to 15 bps, while taxables down 3 to 6 bps.
- Year to date, issuance is up 36% from 2023 and looks like it will set an all-time high. The demand for infrastructure, and lack of excess funds has municipalities issuing bonds to fund new projects. This increase was met by inflows which have been positive since July.
- Munis represent current fair value. Over the longer-term they are a bit rich, but tax-equivalent still looks good as a long-term value of 6.50% to 7.25%.
- The 30-day muni fear indices averages are back up to 2022 levels. Is this a 2025 warning or a short-term spike due to the recent election and heavy issuance?

MainLine will be reviewing the potential partial liquidation of MainLine Tax Advantaged Fund V in the next 30 to 60 days if munis continue to outperform as they have in the last 30 days.

Market News & Credit Update:

- Legalized sports gambling has gone mainstream and has become an important source of tax revenues for the states. Of interest to MainLine is where this money goes. In a review done by Bloomberg, the results show an assortment of "important" and "not so important" uses for the extra revenue. Overall, and quite embarrassingly, less than 2% goes to educate and support problem gamblers. In the Category of "not so important": Arkansas uses 17.5% to fund horse breeding awards and racing purses and Kansas uses 73% to attract professional sports to the state. In the Category of "important": numerous states use it for water projects, with Maryland using 100% to increase teachers' salaries and expanding education and New Jersey uses it to support seniors and people with disabilities.
- S&P put the City of Chicago general obligation debt on negative outlook, warning of a potential downgrade from BBB+ to BBB in the near future. The city is trying to fill a $1 billion budget gap and it's first attempt is to try and raise taxes. The City's fiscal imbalance was not addressed during COVID and instead they used federal aid and stimulus to continue overspending and now have the imbalance. This is only the first of numerous issuers that are going to feel post-COVID strain going forward.

CAT Bonds = SWANs?

Introduction:

In 2024, Hurricane Helena & Milton brought back into focus Catastrophe bonds (nicknamed "CAT bonds") as trading in various markets became volatile at the peak of the storm season. Just one year earlier, in 2023, CAT bonds were one of the most profitable hedge fund strategies. Several multinational organizations have praised CAT bonds as one the most prominent financial innovations in years. In fact, the World Bank has been issuing them for poorer countries since 2009. CAT bonds are a bet on the probability of huge natural disasters for a high payout and is now a $46 billion market. The Catastrophe could be hurricane, earthquake, wildfire or flood. These types of bonds are issued all around the world and have different terms and conditions. There are 300 bonds outstanding with 70% insuring against US storms, with most of them for hurricane risk in Florida. Are CAT bonds a clever climate change solution?

In this monthly review, MainLine will focus on the CAT Bonds issued by the state of Florida that trade in the taxable municipal market. These bonds are less risky than others, have specific guidance on usage and repayment, and are actively traded as an investment grade taxable municipal bond.

Background:

CAT bonds are taxable municipal bonds issued by the state of Florida. They are made up of four CUSIPS for a total of $4.5 billion in par, AA/Aa2 credit ratings, maturities from 2025 to 2034, and initially priced 15 to 25 bps off the US Treasury curve. Florida created the Florida Hurricane Catastrophe Fund (**FHCF**) in 1993. They did so in response to Hurricane Andrew, which caused over $30 billion in losses causing 11 insurers to go out of business and numerous others announcing plans to cancel or discontinue underwriting residential property in the state, ultimately threatening 900,000 policy holders.

FHCF was created to provide additional insurance capacity for the state to reimburse residential property insurers for a portion of their Catastrophe losses. Participation in the FHCF program is, with limited exceptions, mandatory for insurers writing residential property insurance in the state. They must enter into a contract with the State Board of Administration (SBA). They then may choose coverage of 45%, 75% or 90%. Insurers must meet a specified level of losses before FHCF reimbursement begins (like a deductible, known as "Retention"). The retention pre-hurricanes Milton and Helene was $9.9 billion. After each insurer's retention is met, FHCF reimburses them for 45%, 75%, of 90% of covered residential losses depending on that insurer's coverage selection (kind of like a co-payment). For any year, FHCF claims are limited to the lesser of $17 billion (statutory liability limit set by state legislature since 2013) or claims paying capacity (i.e. liquidity) of FHCF.

FHCF has an investment portfolio (in US Government Agencies and Treasuries) of over $11 billion (unrestricted) that is made up of annual premiums paid each year and investment returns. This, plus debt of $4.5 billion and capacity for additional borrowings, brings the balance up to the $17 billion claims paying amount. This claim paying ability is why the rating agencies are grading at AA, close to top-tier credit quality.

Investing in CAT Bonds:

- There are active markets for FHCF bonds and are traded by most of the big municipal broker dealers. Bank of America (3) and Morgan Stanley (1) have been the underwriters for the four FHCF deals since 2020.
- Average of $15 to $20 million trade each day with transaction sizes from $100,000 to $10 million. This means it is being bought by both retail and institutional investors.
- FHCF taxable yields at the moment are from 4.75% to 5.25% depending on maturity and changing credit spreads. They are trading more like an A-rated taxable muni even though they are AA-rated due to the recent strong storm season.

As we noted in the introduction above, CAT bonds are a bet on the probability of huge natural disasters. What are the odds? The chart below is provided in the Official Statement to give the investor an opinion of this.

Hurricane Magnitude	Probability	Losses Per Event (in billions)	Estimated FHCF Liability Aggregate (in billions)
1 in 10 years	10.00%	$ 9,000	-
1 in 20 years	5.00	$16,200	$ 7.782
1 in 30 years	3.33	21.278	13.097
1 in 40 years	2.50	26.006	16.000
1 in 50 years	2.00	30.143	16.000

The chart above shows a 1 in 10 year hurricane has a 10% chance of happening, estimated loss of $9.0 billion but does not necessarily trigger the FHCF liability clause as the current retention level is $9.9 billion. This remains the same if there are two hurricanes in one year - damage is totaled up and put to an aggregated test of $9.9 billion. For a third hurricane, this changes a bit but remains on a pro rated basis. For a 1 in 40 year hurricane with a 2.5% chance of occurring, would equal the $26 billion in losses and FHCF and would have a liability of $16 billion. The current full capacity of $17 billion, according to their disclosure is equal to a 1 in 250 year hurricane. *This appears to give FHCF investors solid debt coverage to support the bonds.*

Conclusion:

CAT bonds are providing a vital public service for the residents of Florida. The muni market has found a marketable, liquid investment to provide insurance at a rate that is affordable and provides investors a good risk/reward profile. As for CAT bonds being SWANS? Let's put CAT bonds into a muni SWAN perspective. The chance of an investment grade muni issuer going bankrupt is 1 in 10,000, or .01%. The chance of a CAT bankruptcy which needs a 1 in 250 year hurricane is .5%. This assumes the future strength and frequency of storms remains the same as the past. The recent liability damage scare of hurricanes Helena and Milton should cause a potential investor to reevaluate forecasting the weather based on history.

Is betting on weather a sleep well at night strategy? Is the weather person always right? *MainLine does not think so and does not invest in this sector.* We will let the other "muni experts" forecast the weather and roll the "hurricane dice".

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