HilltopSecurities
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U.S. Municipal Bond Market

March 18 Market Activity – A Focus on the Significant Pressure in the VRDO Market

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Summary, as of end of trading Wednesday, March 18

- There have been a total of 8,335 coronavirus cases reported in the U.S., 135 deaths, and 106 recoveries to date;[1]
- The municipal variable rate demand obligation (VRDO) market is seeing significant pressure as a result of meaningful and continued fund redemptions. Remarketing agents have priced many issues at levels ranging from 4% to 7%, significantly higher than recent experience. Some issuers were pricing much closer to their reference rates before the market pressure;
- Securities Industry/Financial Market Association (SIFMA) just set at 5.20%, up considerably from 1.28% where it was set on March 11th. The recent high was 1.61% set on Dec. 25, 2019. We compare SIFMA and LIBOR/SOFR levels in the commentary below;
- The final read for AAA MMD (The Municipal Market Monitor) saw only a 10-15 basis point increase across the curve;
- The New York Metropolian Transportation Authority (MTA) requested $4 billion of federal aid as subway ridership fell 60% and commuter ridership fell 90%.[2] This is not a good sign for transportation and transit credit quality and we see it generally weakening as a result of COVID-19 containment measures.

Seeing Significant Pressure in the US Municipal VRDO Market

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In recent days, the U.S. Federal Reserve announced extensive programs to help support capital markets functioning and facilitate the availability of credit. We have seen quantitative easing measures, a Primary Dealer Credit Facility (PDCF), and a Commercial Paper Funding Facility (CPFF) all come out of Washington, D.C. However, the PDCF does not support non-primary dealers and the CPFF does not cover the U.S. municipal variable rate demand obligation/note/bond (we will refer to them as VRDOs throughout) market.

This is important because we have recently seen significant pressure in the U.S. municipal short-term market, which has flowed through and pressured the VRDO market specifically. We are not seeing or expecting near term relief as a result of the Federal Reserve's recent actions. Fund selling has been and continues to be too extensive. Our observation is that there is generally not much liquidity from funds in the municipal market, nor in the short-term municipal market. Specifically, credit is not flowing as smoothly as it may appear in other markets, according to general market observers.

What are Municipal Variable Rate Demand Obligation/Bonds/Notes?

To access the short-term funding market, U.S. municipal bond market participants often utilize products like VRDOs.[3] There are currently about $139 billion of VRDOs outstanding, spread among 4,539 CUSIPs, down from $420 billion and 16,169 CUSIPs in July 2009, according to SIFMA data.[4] Of those issuers who have sold VRDOs, the highest concentration currently by municipal sector is the healthcare sector (with 18% of par outstanding) and the multi-family housing sector with (15%).[5] These variable rate securities are used when long-term rates are relatively high, when an issuer wants to take advantage of the flexible structure, or when some issuers may want to include VRDOs as part of a more complex debt portfolio management strategy.

Please see disclosure starting on page 4.

Basic Structure, Pricing, and the Remarketing Mechanism of VRDOs

We generally see VRDOs with stated maturities of 20-30 years, but these are short-term securities, and there is flexibility when the interest rate is scheduled to reset. The interest rate can be reset daily, weekly, monthly, or semi-annually, and interest is paid monthly or semi-annually. Additionally, they are callable on any interest payment date. A key distinguishing feature of VRDOs is their "put" feature or the ability for an investor to put-back the investment. This feature contrasts with other short-term municipal financing options. The put feature allows the investor to put-back, or tender, the VRDOs with advance notice on a schedule that typically coincides with the price reset. Then it is up to the remarketing agent to find another interested buyer. Bank backstops help protect the process in the case where the remarketing agent cannot find a new investor. Liquidity is provided in the form of a bank Letter of Credit (LOC), or a stand-by-bond purchase agreement (SBPA). The trustee could draw on the LOC or SBPA for payment. If a new buyer cannot be found, the liquidity provider takes ownership of the bonds, and a higher "bank bond" interest rate applies to the securities. A potential option for issuers if this happens under current circumstances would be to approach the bank providing the liquidity, or another bank, to inquire about the potential for a loan to take out the VRDOs.

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Tax-exempt VRDOs are priced off of a spread to SIFMA (many taxable VRDOs are priced off a spread to LIBOR), but in recent years a transition to other reference rates has been ongoing in the taxable space, as LIBOR is set to be discontinued in 2021. A leading taxable reference rate option is the Secured Overnight Financing Rate (SOFR) and some are transitioning, but slowly. The disorder in the short-term municipal market can be illustrated in the direction and magnitude of change in SIFMA compared to LIBOR and SOFR. Understanding the significant changes in each direction are important for those who have sold and for those potentially (even those very few at this point) looking to own VRDOs.

One month LIBOR was most recently priced at 0.75%, up from the 0.61% level it dipped down to Monday, but also down from 1.51% at the end of Feb 2020. SOFR, now 0.54% (March 17, 2020), is up compared to the 0.24% it fell to last week on March 12. But, the current SOFR level is lower than the 1.56% it reached at the end of Feb. 2020. SIFMA reset at an astounding 5.20% this afternoon, up 392 basis points from last week's 1.28%, and a significant difference from the 1.15% mark at the end of Feb. The six-month high for SIFMA has been 1.61%, which it reached on Dec. 25, 2019. This leap, and difference in trajectory and the magnitude of change, is a good indication that short-term municipals are getting hit with extraordinary activity and investor pressure.

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This Week in the Municipal VRDO Market – Seeing Significant Pressure

Again, we are seeing a significant amount of pressure on the short-term municipal market, and this is very true for VRDOs. Traditionally, the buyers of VRDOs include money market funds, high net worth retail investors, and some corporate investors. Funds have been one of the largest holders of VRDOs because they are among their most liquid assets. It is possible that the funds exercise that put option we noted above and tender back bonds they may have otherwise kept, but are required to liquidate because of the selling pressure they are facing. It is also possible cross-over or non-traditional buyers recognize the opportunity in time. This type of activity would go a long way in finalizing successful remarketing(s) going forward. A typical element of VRDOs, and two of the reasons that money market funds have found them appealing, is they are traditionally considered of strong credit quality and are seen as being highly liquid relative to other securities. It is important to note that they come in $100,000 denominations.

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Municipal Fund Outflows

In contrast to some conventional thinking, we have seen the notable market volatility take a toll. In recent days, we have seen a significant amount of outflows from long- and short-term municipal funds. Investor redemptions are driving outflows and we are seeing funds sell for liquidity.

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Data showing flows from municipal funds continued. Recent Investment Company Institute (ICI) data confirm Lipper's numbers from last week. ICI reported flows out of municipal funds of $3 billion for the week ending Mar 11. As a reminder, Lipper reported flows from municipal funds of $1.76 billion on Thursday, March 12 and $250 million on Thursday, March 5. We currently expect municipal fund flow data to report outflows, and we expect them to be significant based on the daily flow data we have been seeing.

Monday alone saw $234 million pulled out of short-term municipal funds, and on Tuesday almost $443 million was withdrawn. We cannot state with enough emphasis how significant the selling pressure has been on many of the institutional funds.

As a result, in order to find buyers, VRDOs are being priced at levels that it takes to clear the market, which have been noteworthy. On Tuesday and Wednesday this week issues were being reset at levels mostly ranging from 4.00% to 7.00%, per data we saw on the MSRB's EMMA website.[6] Issuers and investors had become used to seeing interest rates near, or just over, 1.00%. We know of some issuers that, for example, have gotten used to seeing their remarketings at levels near or on top of SIFMA. Issuers are going to be astonished by the new levels, and the few investors around with available liquidity are likely going to take advantage of the extreme dislocation.

Final AAA MMD Market Movement

The final read for AAA MMD saw a 10-15 basis point increase across the curve. This movement does not seem to be reflective of all of the fund selling and bid lists we have observed. The changes were: 15 basis point on the short end, from 2021 to 2031, as the short end continued to get pounded by fund selling, 10 year AAA MMD ended the day at 1.84%, and 30 year AAA MMD ended the day at 2.47%.

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Recent HilltopSecurities COVID-19 Municipal Commentary

- March 17 Market Activity, March 17, 2020
- March 16 Market Activity: HilltopSecurities Lowers Credit Outlooks Due to Unprecedented Steps Taken to Contain COVID-19, March 16, 2020
- Municipal Market Update: Week of March 16 Playbook, March 16, 2020
- Municipal Market Update: COVID-19 Impact Worsens, March 12, 2020
- Lowered Airport Sector Outlook: Recent COVID-19 Impact, March 11, 2020
- Falling Confidence and No Federal Stimulus Increase to Start the Week, March 9, 2020
- Uncertainty – What the Municipal Market Knows and Doesn't Know About COVID-19, March 4, 2020
- Bracing for the Worst; the Coronavirus Market Effect – Status of the Coronavirus Impact on the US Municipal Bond Market (page 2), Feb 26, 2020

Recent HilltopSecurities COVID-19 Economic Commentary

- Serious Support on the Horizon, March 16, 2020
- Waiting on Fiscal Policy as Aggressive Fed Move Falls Flat, March 16, 2020
- Stocks Rebound as Central Banks Respond, March 13, 2020
- On the Edge of Recession, March 12, 2020
- Central Banks Rush to Mitigate Pandemic Fallout, March 11, 2020
- Untying the Knot, March 10, 2020
- Runaway Markets Ignore Massive Payroll Number, March 6, 2020
- Bracing for Zero, March 5, 2020

[1] *Please see Worldometers.info/coronavirus for data updated hourly, last accessed 3/18/20 4:13pm central time.*
[2] *Goldbaum, Christina; M.T.A., Citing Huge Drop in Riders, Seeks $4 billion Virus Bailout; New York Times; March 17, 2020.*
[3] *Municipal issuers also often use floating rate notes or auction rate securities/certificates, but we are going to focus on the VRDO market.*
[4] *U.S. Municipal VRDO Update; SIFMA; December 2018.*
[5] *Ibid.*
[6] *Choose Variable Rate Demand Obligations under the Market Activity Tab at the MSRB's EMMA website.*