MMA Independent and Data Driven

FEBRUARY 3, 2020

WEEKLY OUTLOOK

MARKET UPDATE: *Constructive market context has some accounts selling, but not enough to dim the rally.*

RECOMMENDATION: *Volatile valuations in the municipal market, with the first ten maturities (in particular the first five) reading as still overbought but weakening rapidly; an ideal area for issuers and sellers to concentrate their efforts. Most of the balance of the curve is mixed, but with a strong bid beginning to emerge at the very long end, maturities 22yrs and later. Buyers should pay attention here accordingly.*

CREDIT RECOMMENDATION: *Cybersecurity risks manifest as a credit worsener: Becker's Hospital Review reported last week that cybersecurity incidents and lawsuits from affected patients are on the rise at hospitals and health care systems, citing five recent lawsuits. And for the first time we are aware of, a municipal issuer reported a material event on EMMA—a covenant breach—at least partly related to a cybersecurity attack.* ***MMA's*** *first cybersecurity entrant into its Default and Impairment Database is* ***Pleasant Valley Hospital*** *in WV. As a result of the attack and weakening patient volumes, the hospital saw its debt service coverage drop to 0.78x. The resolution of the situation will likely cost the hospital via monetary settlements and security hardening, making a financial rebound a bit more difficult than otherwise. Pleasant Valley highlights cyber risks as, at least so far, primarily a worsener for most municipal credits. In other words,* ***cyber risk appears to be an additive factor, more likely to lead to material damage and/or impairment among already weak or struggling credits****.*

ATTEND THIS: *BDA &* ***MMA National Municipal Bond Conference*** *is May 4-5 in Dallas: "Challenges and Opportunities from Rates to Regulation to Climate Change"*

SUMMARY

- January ended with additional price gains and, despite municipal bonds' ignoring a late-week rally in US Treasuries, fresh record low tax-exempt yields; **MMA** Consensus average is now 1.47%.
- The **MMA** yield curve strengthened 5-11bps along a flatter curve while USTs, propelled by a 10bps rally on Friday, steepened, yields falling 13-19bps with largest gains at the 5yr maturity.
- The taxable market driver was again worries over global growth and worse via rapid spread of the coronavirus in China.
- Flight-to-safety adjustments could have been affecting municipal prices as well, but our sector has needed little outside influence recently; customer purchases accounted for 49.2% of all par traded last month: a January record going back at least to 2008.
- This not only follows a lack of inter-dealer trading (noting that dealers have needed to rely less on their peers to move inventories) but also the exceptional customer demand input.
- ICI shows weekly inflows at or near $2.5B in each of the last four weeks: an apparent January record assuming last week's actual data conforms with projections.
- Meanwhile preliminary tax-exempt January issuance was just $22B, meaning roughly 40% of fresh (ICI) and recycled (maturities and calls) demand had no obvious tax-exempt target absent what other accounts made available in the secondary market.
- And as that has occurred, some market lag has likely followed, although broad selling pressure remains minimal and permitting no measurable spread widening as would be normally expected.
- Instead, as noted in today's ***STRATEGIST***, **MMA**'s total rate of return indexes after one month have already reached 70+% of the annual average TRR of the past 6 years. The sectors of greatest performance during the month were PR and tobacco bonds, the former on simple excess reinvestment needs, the latter on a building sector refinancing momentum that feeds the former.
- Also inside, **MMA's** Chris Hamel proposes a climate change cabinet position in his **NOTES ON INFRASTRUCTURE**.

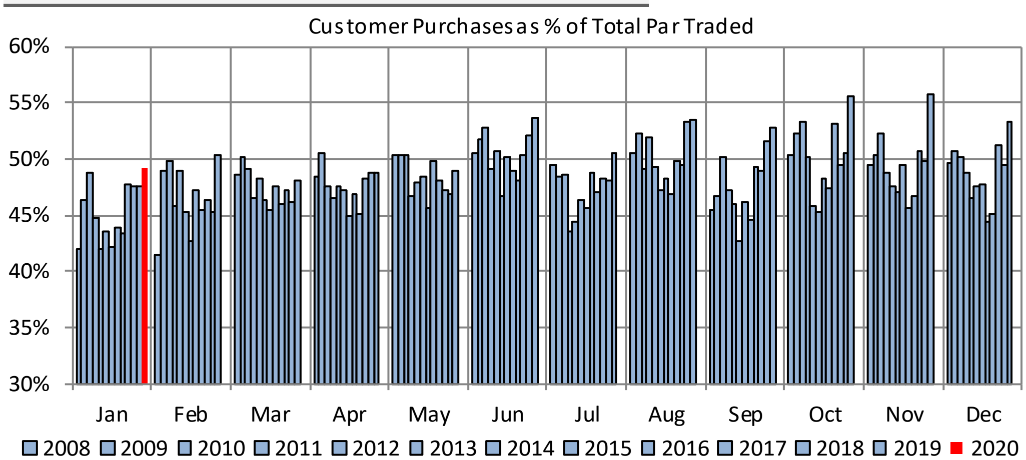

Figure 1: Last month was the most buyer-oriented January in over a decade; spreads can only tighten in this context

IN THIS ISSUE

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LAGGING CLIMATE AND CYBER RISK DISCLOSURES

LAGGING CLIMATE AND CYBER RISK DISCLOSURES: Municipal issuer disclosure of the impact of climate and cyber related risks and their mitigants is often less than comprehensive in offering documents. Investor engagement vis-à-vis outreach, questions asked at issuer-hosted meetings and roadshows, the availability of third-party data, and increased rating agency focus should accelerate the provision of specific and meaningful ESG-related disclosures. In effect, **MMA** expects that disclosure related to ESG issues is likely to evolve similar to that in other areas that spurred credit concerns (e.g. pensions, bank loans, swaps). Issuer engagement and pre-sale dialogue can help to identify disclosure deficiencies and inform the crafting of future offering documents and continuing disclosure submissions. Benefits could at least theoretically accrue to municipal issuers scoring well via deeper market demand and liquidity, and possibly a lower cost of capital. and to reduce the potential of future claims against issuers of withholding material information needed to adequately evaluate securities. Investors benefit if a robust dialogue with issuers leads to more comprehensive disclosures, informing investment decisions.

Regulator action often drives better disclosure: Public pension disclosure improved largely as a result of the SEC's nationwide review of municipal offering documents to assess the adequacy of the information provided, specifically related to the potential financial risks resulting from pension funding practices and/or liabilities. Several SEC enforcement actions resulted, notably against NJ, IL, and KS, beginning in 2010. In response, a 2012 NABL paper targeted at issuers, their lawyers, and other financing team members laid the foundation for the current, and much more extensive pension disclosure found in offering documents today. It follows that, **as more robust information becomes available on the potential financial costs related to the impacts of climate change and cyber risk, it isn't beyond the pale to consider that the SEC may be persuaded that a review is warranted, in particular following a severe event in a high-risk area or a security breach that significantly alters a large issuer's credit position**.

BHC transaction trades up: Late last week, **MMA**'s *Insight* highlighted newly-issued bonds for Baptist Health Care (BHC) through Escambia County Health Facilities Authority, FL, which traded up at 2.72% compared to an original yield of 2.78% (4s of 2050). These bonds may have initially drawn investor concern from a combination of BHC's location in the FL Panhandle and the official statement's mostly non-specific treatment of climate change risks. However, mid-sale disclosures elaborated on resilience planning in the project's relocation and replacement of BHC's flagship facility further inland. The new structure will comply with stringent FL building codes and should better endure both flooding and high winds. AGM's participation on some of the 30yr and (taxable) 20yr maturities may have also been a key in alleviating longer-term climate risk concerns.

The BHC situation highlights how, while municipal borrowers located in areas already frequently impacted by severe weather may be at disproportionate risk from climate change in the future, these same entities may also have a head start on related mitigation and adaptation strategies. Conversely, borrowers in areas facing more emergent climate change risks (e.g., Midwest and MidAtlantic states) may be relying on less informed and tested emergency plans, less robust building codes, and a less sympathetic political regime. This requires lenders to entwine any hypothetical, geography-based credit discrimination related to climate change with a

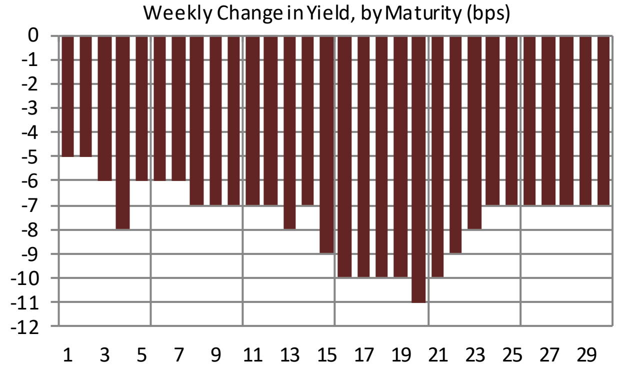

Figure 2: Yields lower along a flatter curve last week

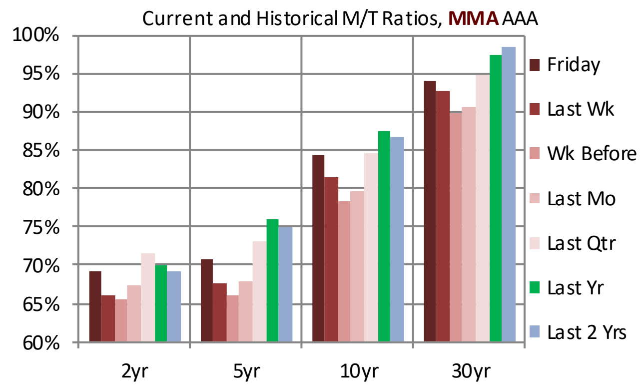

Figure 3: Ratios jumped on Friday's flight to safety buying of USTs

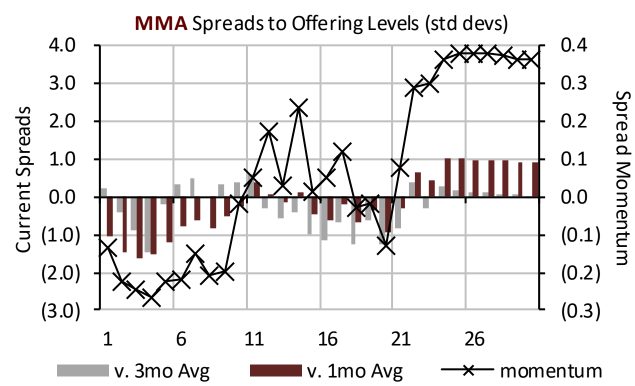

Figure 4: Valuation showing an increase in volatility

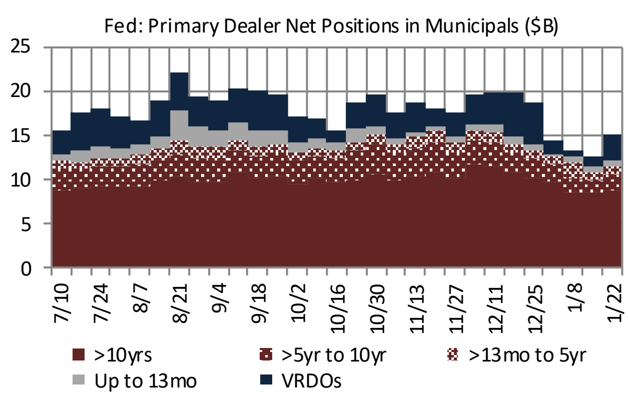

Figure 5: Dealer holdings of non-VRDOs up slightly vs multi-year lows

NEW INFRASTRUCTURE PROPOSAL

consideration of climate-related issuer/local specifics in every case: a challenge complicated by the municipal market's poor disclosure practices and lack of data regimentation.

NEW INFRASTRUCTURE PROPOSAL HIGHLIGHTS PROBLEM WITH INFRASTRUCTURE PROPOSALS: The House Ways and Means Committee released a long-awaited framework for an infrastructure bill that would spend $780B on a panoply of projects, states, and policy goals. This may take shape as an actual bill before the end of the current Congress, but chances of it becoming law in that timeframe are minimal. The problem is not just extreme and intensifying partisan polarization, but also that the framework as written has no proposed funding mechanisms. This suggests: 1) a lack of consensus among Democrats regarding which taxes (besides the Federal gas tax) to raise and/or which current Federal spending to redirect to the proposal's benefit; and thus: 2) a current weakness in any public mandate for Congress to intervene in infrastructure on this scale. **MMA** regards the latter as more potent than the former. **The chronic absence of a national mandate for Federal infrastructure reflects the scattering of local benefits when a number even as large as $780B is thinly spread across all 50 states, with politically-essential overallocations to rural areas where economic multipliers are minimal.**

So while the framework's largest allocation, $319B for highways, would provide, "funding for vital infrastructure projects of regional and national significance, with focused eligibility criteria and reduced Secretarial discretion over project selection," it immediately thereafter carves out special attention to rural bridges and rural/disadvantaged communities in general. These are not bad purposes, but they dilute local effects and undermine a hypothetical bill's national constituency. Note that the proposal does elsewhere attempt to leverage extendable programs like state revolving funds to advance larger-dollar investments in drinking water improvements. And spending towards the development of clean energy generation and transit systems over highways would accrue long-term national benefits in helping to cut carbon emissions.

But the proposal does little to close the direct empathy gap between local voters and a national program. **MMA** believes our own proposal for a national infrastructure census would help here. We estimate Congress could allocate as little as $10B to pay for a nationwide audit of existing infrastructure maintenance. The study would be conducted by thousands of engineers working with many of our 90,000 state and local governments to establish jurisdiction-by-jurisdiction cost estimates for bringing infrastructure to acceptable levels of repair. Related liabilities could be carried on local government balance sheets, creating an incentive not only for locals to appeal for Federal assistance, but also to create state, regional, and local funding solutions similar to those engendered by the standardization and transparency of public pension liabilities.

Finally, the Federal proposal would, as expected, relaunch the BABs product even if: 1) today's demand-vs-supply imbalance is the exact opposite of the brief 2008 buyers' strike that sparked creation of BABs in 2009; 2) a surge of unsubsidized taxable issuance is propelling 2020 primary market activity; and 3) a removal of additional tax-exempt supply could crush residual lender discipline in our market, facilitating excess muni borrowing and defaults and pushing more tax-exempt lenders to stop adding to positions, to the detriment of BABs' stated goal of growing muni demand.

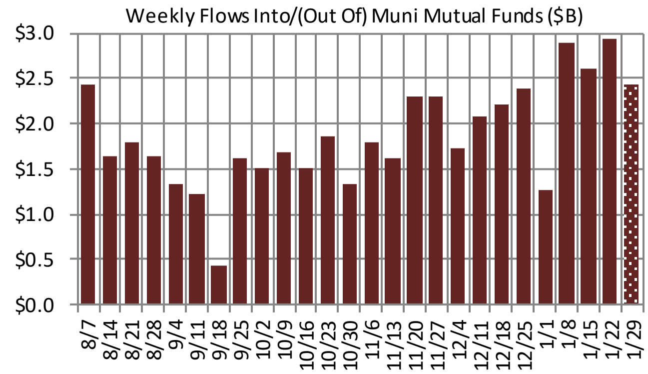

Figure 6. Blazing inflows to the funds

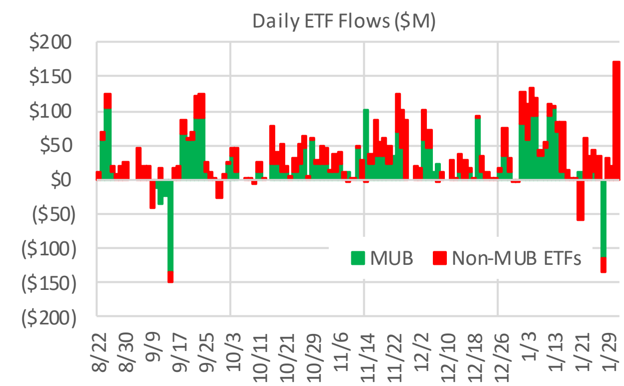

Figure 7. Notable volatility in ETF flows in the last week

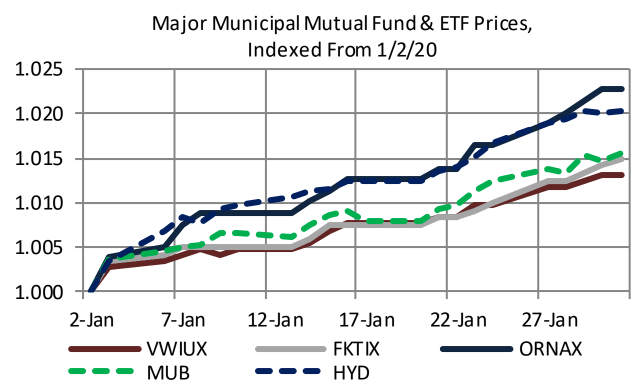

Figure 8: But all managed vehicles performing very well in 2020

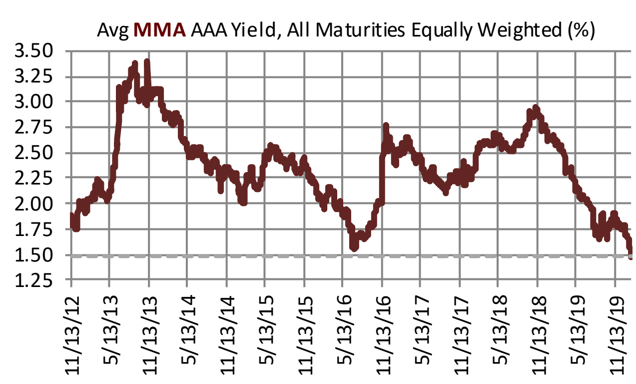

Figure 9: Fresh record low average AAA yield @1.47%

NOTES ON INFRASTRUCTURE BY CHRIS HAMEL, SENIOR FELLOW

It's Time: US Requires Cabinet-Level Post of Secretary of Climate Change Defense

"The evidence on climate change risk is compelling investors to reassess core assumptions about modern finance."

--Laurence Fink, CEO, BlackRock, January 12, 2020 Annual Letter

When the history of the successful global response to climate change is written decades from now, the recent declaration by Laurence Fink of BlackRock will be a chapter.

A key step to US and global success will be the creation of a new Cabinet post charged with overseeing our needed response to this generational challenge.

As a reminder, BlackRock is the Earth's largest asset manager with $7 trillion under its watchful eye. Fink views his conclusion on this topic as separate from politics, as the New York Times reported, and as one of a "fiduciary".

Which is what the US must do now: a federal-level appointee charged as a "fiduciary" of the US and its climate future.

Creation of a senior federal post would acknowledge the reality of the science and its consequences as an essential step in developing solutions for the global challenge. The posting would have twin responsibilities: slowing the warming trend and, falling short of a temperature increase that changes our environment as we know it, promoting adaptation that prevents calamitous effects. It would take the lead across all federal agencies in a coordinated response.

Note that Fink's announcement follows a BlackRock April 2019 report on climate change that states "climate-related risks are under appreciated in the U.S. municipal bond market". The current frenzy of buying with no indication of pricing differential with respect to credits prone toward climate risk suggests this BlackRock observation remains valid.

But Fink's January message was not this new year's only noteworthy climate change warning. The Green Swan – Central Banking and Financial Stability in the Age of Climate Change is a report released by BIS or the Bank for International Settlements. Its charge is the promotion of global monetary and financial stability. Recall that BIS was pivotal for its hand in advancing new bank capital standards in response to the Great Recession of a decade ago.

So, what BIS says matters. Its "green swan" is a reference to the term of "black swan" which is one way writers have referred to unexpected and stressful events that led to the last financial crisis. BIS' report states "climate change could … lead to 'green swan' events and be the cause of the next systemic financial crisis." It discusses the role of central banks and stresses the essentiality of "collective action" across all institutional concerns—public and private—in "preserving financial stability".

Both the BlackRock and BIS reports amplify a newer development in the discussion of the consequences of climate change: the sense of urgency now voiced by the financial sector in addition to those of scientists and environments. And, since this sector has its hand on the wheels of commerce, its judgments will likely be felt across the global economy.

It's time if not overdue for the US federal government to match this development with of the creation of this new cabinet post. It would be both a substantive and symbolic act signaling to the country and the globe of the necessity of action.

This is not entirely out-of-step with adaption policies of the current Washington Administration. As the New York Times recently reported, billions of federal dollars will shortly be released to various states to address coastal and other flooding issues. Many of those states' funding applications do not reference climate change but only what many see as its consequences: "changing coastal conditions" or "destabilizing effects and unpredictability".

Potato, potahto, tomato, tomahto. From my vantage point, it is reassuring that meaningful adaption activities are in process whatever they might be called.

In climate change circles, there are many times a reference to World War II as reflective of the scale of global effort required to overcome the challenge of climate change. A student of history knows, it took the devastation of Pearl Harbor for the US to enter that fray despite the rise and actions of Hitler throughout the 1930's. One way or the other, we will get to the point of serious engagement on the issue of climate change. When we do, we should have a point person for our response.

This new Cabinet post should be created now lending strategic oversight and enhanced energy to the weighty tasks ahead.

CHARTS

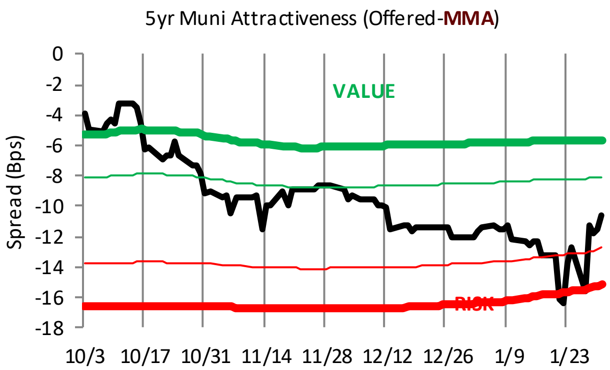

Figure 10: Short maturities in neutral; no yield bias

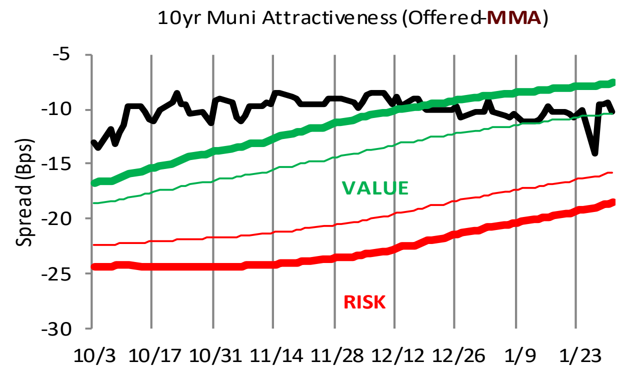

Figure 11: Intermediate maturities in value; yields biased lower

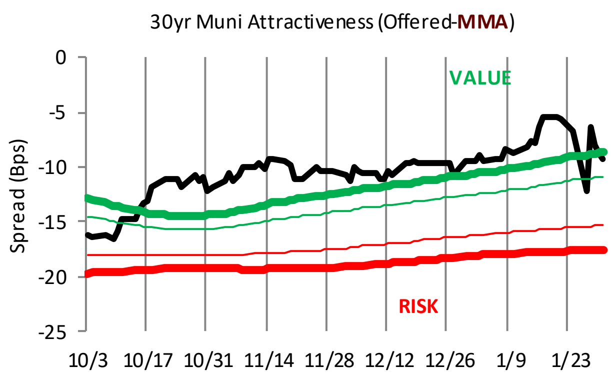

Figure 12: Long end in value, bias to lower yields

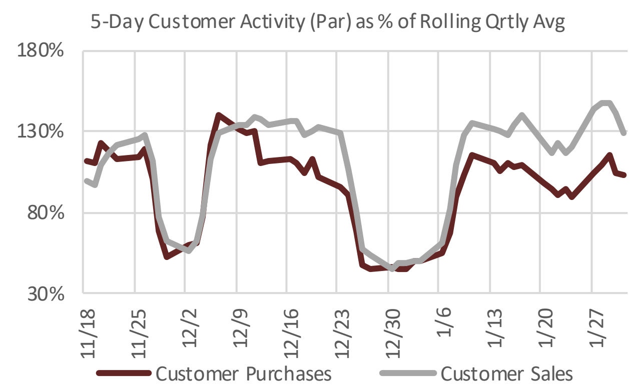

Figure 13: Customer selling has been elevated vs expectations

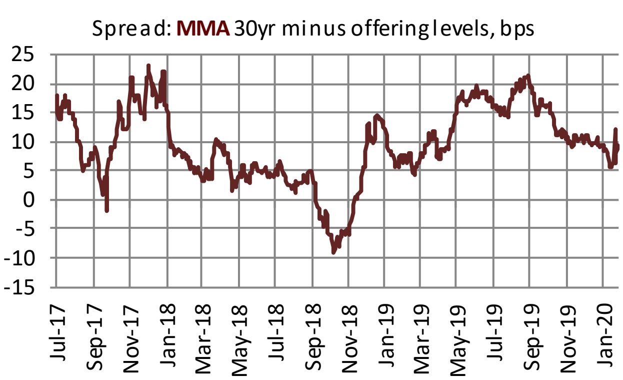

Figure 14: The long end of the curve has finally begun to rally

Weekly Market Volumes, Actuals and *Estimate* ($M)

Week Ended	MSRB Par Traded	Primary Supply	Fund Flows	Net Supply	Secondary Volume	10yr Yield
12/13	65,167	13,839	2,076	11,763	51,328	1.54%
12/20	60,725	7,585	2,210	5,375	53,140	1.57%
12/27	28,086	34	2,387	(2,353)	28,052	1.57%
1/3	29,885	0	1,268	(1,268)	29,885	1.49%
1/10	62,560	8,346	2,906	5,440	54,214	1.46%
1/17	62,075	8,923	2,618	6,305	53,152	1.40%
1/24	66,571	7,391	2,934	4,457	59,180	1.34%
1/31	58,701	7,013	*2,437*	4,576	51,688	1.27%

Figure 15: Modest tax-exempt issuance = outperformance amid inflows