

Municipal Market Weekly

Ramirez Municipal Strategy



February 12, 2018

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Volatility and uncertainty surged last week, leading to significant sell-offs in both rates and equity markets. The higher volatility is the result of investor fears of a potentially overheated economy, higher inflation, and resulting higher rates across the curve. The perception that the Fed may be “behind the curve” on increasing rates -- scheduled for three hikes in 2018 -- combined with rate fears in Europe and Asia, are also contributing to weakness. The BOE’s hawkish comments on Thurs indicated a higher likelihood of higher rates in the UK beginning in May. The rates market is also concerned about significant additional deficit-financing in the US, including \$1 trillion of new Treasury supply necessary to help pay for the recent \$1.5 trillion tax cut and the most recent bi-partisan Senate budget deal that grows spending by \$300 bil. over two years. Treasury auctions last week were weaker on news of the Senate spending plan, most notably the \$24 bil. 10yr bond auction on Wed that was the weakest in five months. The combination of all factors over the past two weeks has led to a rapid paradigm shift to higher volatility from low volatility that has spilled over most dramatically into equities. The DJIA index last week traded into correction territory, experiencing four days with 1,000+ intra-day point swings (4 of 5 largest on record) as investors fear higher rates will eventually weigh on corporate earnings. In the rates market, Treasury 5s30s was steeper by +6bps to end at 60 bps on the week, with the 5yr note off +2 bps to 2.57%; the 10yr note off +5 bps to 2.88%, and the 30yr bond off +8 bps to 3.18%. Munis noticeably outperformed Treasuries (1-3 ratios) due to the high equity market volatility and perception of Munis as a Treasury alternative, indicated by net inflows of \$675 mil. on the week and \$3.9 bil. YTD. A combination of the continued strong inflows and yet another week of paltry new issue (\$4.1 bil.) resulted in a positive total returns on the week for Munis with the S&P Main Muni index up +17 bps (but -118 bps YTD), as MMD 5s30s flattened -2bps to 105 bps, including a -1bp bump in 5yrs and -3 bps in 30yrs.

The good on-paper outperformance of Munis last week amidst broader market chaos belies some underlying weakness, which we feel is in sympathy with weaker rates generally, particularly in 10yrs and out. There were two days last week with over \$1 bil. of BWICs, which is about 50% above-average, as investors seek to shorten duration and rotate to more defensive structures and higher credit quality. As a result of the repositioning, we have noticed growing weakness in 15yr+ maturities with 6-8yr calls as well as certain maturities with 4% or lower coupons. Despite the better relative value of Munis at this time, the asset class is still generally rich with only the 1-5yr spots fairly valued vs recent history (see below). Primarily for this reason, in addition to still heavy dealer balance sheets (~+25% above avg) and a supply overhang from Dec, 2017, we affirm our conviction that Munis still have to get cheaper before stabilizing. To the extent that the 10yr Treasury breaches ~3%, however, we do think that more retail buyers will materialize and provide greater support to the market.

Fortunately for the Muni market, new issue supply has been extraordinarily weak and remains light, partly due to the fact that it is only Feb but more so due to the outsized supply in Dec, 2017 and the uncertainty of the rates picture. Gross supply YTD is \$25.7 bil., or -42% vs last year at this time (\$44.3 bil.) Last week’s new issue supply was a paltry \$4.1 bil. and was generally well received / placed. This week’s new issue calendar is slated for only \$3.9 bil., which includes including the rescheduled \$1.39 bil. PA Tobacco / Sales Tax, which we think will be priced to sell given the structure and credit. Over the next 30 days we see net muni market supply at -\$13.93 bil., comprised of +\$5.70 bil. new issue, -\$14.14 bil. maturing, and -\$5.49 bil. announced calls. The states that stand to experience the largest change in outstanding debt include Texas (-\$4.05 bil.), Illinois (-\$1.88 bil.), California (-\$1.46 bil.), New York (-\$1.46 bil.), and Pennsylvania (+\$1.05 bil.). Our estimate for gross supply in 2018 remains at \$317 bil., or -27% YoY.

This week’s most watched statistic will most certainly be Wed’s release of Jan CPI and Jan PPI, with the market expecting a 0.30% and 0.40% gain respectively. This data will be a critical test directionally for all markets since it will indicate whether or not the recent strong economic statistics are a continuing trend or not. There is also one Fed Speaker on tap and Trump will provide details of the vaunted infrastructure plan, which is expected to include expansion of PABs.

Rates & Ratios

	YIELDS (%)				Lo 12M	Hi 12M	Mean 12M	SD 12M	Value	
	2/9/2018	2/2/2018	1/3/2017	2/10/2017					12M	3Y
AAA MMD / UST										
2 Yr	72%	73%	100%	85%	62%	89%	74%	6.57	Fair	Fair
5 Yr	75%	75%	91%	80%	62%	85%	73%	5.41	Fair	Fair
10 Yr	84%	87%	94%	94%	79%	100%	87%	4.65	Fair	Rich
30 Yr	93%	97%	99%	101%	90%	104%	98%	3.01	Rich	Rich

*Rich/Cheap: +/- 1.0 Z-Score

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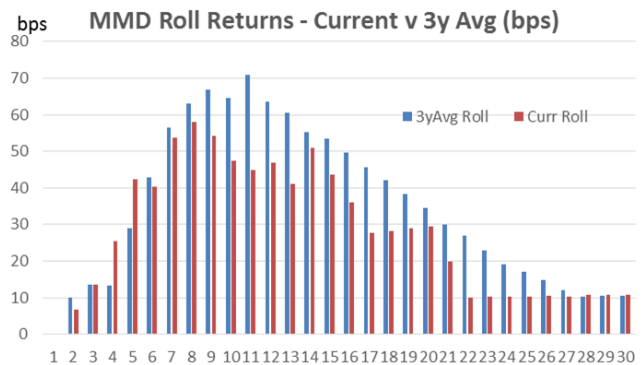
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2018 Strategy

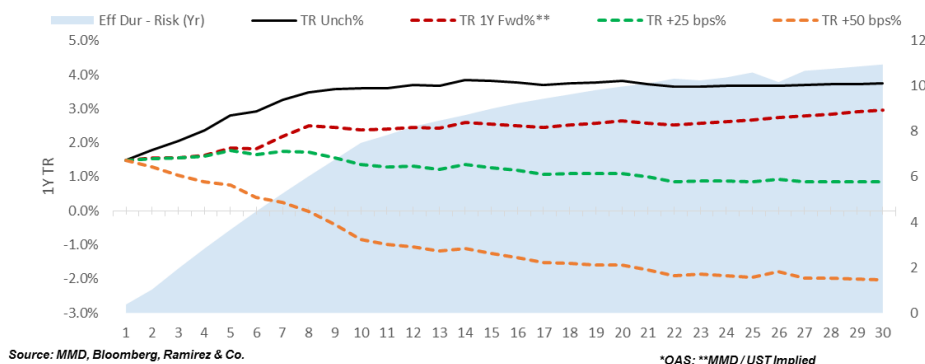
- Ladder strategy
- Defensive posture (5yr eff dur; 7yr WAM)
- Intermediate-long bonds with shorter calls (5-8yrs vs 10y); cheaper vs longer calls, capture better spread and roll-down, faster reinvestment
- Best rolldown range is 8-15yrs.
- Coupon: 5%+ (lower convexity vs 4%)
- Credit: 'AA' GOs, 'A' rated or better Revenue Bonds;

	Scenarios				
	Bear Case	Base Case		Bull Case	
Strategy	Ladder (Short)	70/30 Bar	Ladder	30/70 Bar	Ladder
Crv Shft (avg bps)*	50	25	25	11	11
Quality	>= A+	>= A+	>= A+	>= A+	>= A+
TR % Proj.	1.97%	2.18%	1.85%	3.42%	3.43%
OAS (bps)	48	42	29	56	56
Eff Dur (yrs)	0.4	6.9	4.4	9.6	10.8
WAM	1.0	15.1	6.2	25.4	28.5
Cnvx	0.00	-0.65	0.29	-1.70	-1.71

11 *avg bps shift =FWD curve



MMD Callable Curve (5% Cpn) - 1Y Total Return Projections*

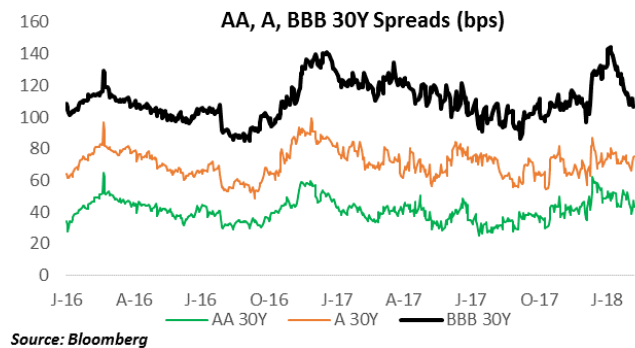
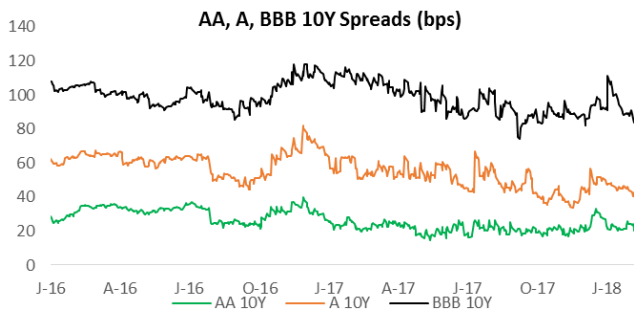


MMD Callable Curve (5% Cpn) - 12M FWD Total Return Projections*								
	Mty	1-30y	1-5y	6-10y	11-15y	16-20y	21-25y	26-30y
	Eff Dur	0.0	2.5	6.2	8.5	9.6	10.3	10.7
Scenarios	Unch	3.62%	2.38%	3.41%	3.72%	3.76%	3.67%	3.71%
	1Y Fwd Rates	2.55%	1.68%	2.30%	2.49%	2.54%	2.60%	2.85%
	Parallel +25 bps	1.12%	1.65%	1.58%	1.29%	1.11%	0.89%	0.87%
	Parallel +50 bps	-1.37%	0.92%	-0.20%	-1.12%	-1.53%	-1.88%	-1.96%

Rates & Ratios

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	2/9/2018	2/2/2018	1/3/2017	2/10/2017					12M	3Y
AAA MMD / UST										
2 Yr	72%	73%	100%	85%	62%	89%	74%	6.57	Fair	Fair
5 Yr	75%	75%	91%	80%	62%	85%	73%	5.41	Fair	Fair
10 Yr	84%	87%	94%	94%	79%	100%	87%	4.65	Fair	Rich
30 Yr	93%	97%	99%	101%	90%	104%	98%	3.01	Rich	Rich
UST										
2 Yr	2.09	2.12	1.23	1.21	1.16	2.16	1.49	26.95	Cheap	Cheap
5 Yr	2.57	2.56	1.97	1.91	1.61	2.58	1.97	21.30	Cheap	Cheap
10 Yr	2.88	2.83	2.46	2.43	2.03	2.88	2.35	15.07	Cheap	Cheap
30 Yr	3.18	3.10	3.07	3.04	2.65	3.21	2.89	11.41	Cheap	Cheap
AAA MMD										
2 Yr	1.51	1.55	1.23	1.02	0.85	1.57	1.10	23.61	Cheap	Cheap
5 Yr	1.92	1.93	1.79	1.53	1.12	1.93	1.44	20.72	Cheap	Cheap
10 Yr	2.42	2.46	2.32	2.30	1.81	2.49	2.06	17.28	Cheap	Cheap
30 Yr	2.97	3.00	3.05	3.07	2.46	3.25	2.82	16.78	Fair	Fair

*Rich/Cheap: +/- 1.0 Z-Score



Credit spreads remain very tight...

SECTOR CREDIT SPREADS (10Y)								
3Y STATISTICS								
Sector	Rating	2/9/18	Avg	Min	Max	SD	3Y Z-Scr	Value
GO	AA	22	25	12	40	6	-0.53	Fair
	A	37	56	25	86	13	-1.50	Rich
HOSP	AA	36	39	25	60	6	-0.56	Fair
	A	53	66	48	102	7	-1.86	Rich
HI ED	AA	24	26	12	40	6	-0.41	Fair
	A	43	55	32	94	10	-1.16	Rich
TRANS	AA	20	27	12	47	8	-0.98	Fair
	A	37	48	28	87	10	-1.04	Rich
POWER	AA	25	17	5	32	6	1.18	Cheap
	A	40	48	32	72	8	-1.05	Rich
WTR / SWR	AA	10	24	10	41	5	-2.56	Rich
	A	50	63	32	104	15	-0.81	Fair
HY	<BBB-	228	310	228	472	54	-1.53	Rich

Source: Bloomberg

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Market Performance Indicators

WEEK ENDING: 2/9/18

INDEX	Eff Dur	TOTAL RETURN (%)								YIELD (%)							
		WTD	F-18	J-18	2018	2017	2016	2015	WTD	YTD	Lo	Hi	Mean	Vol	Z-score		
									2/9/18	Δ	Δ	12M	12M	12M	12M	12M	3Y
TREASURY-TERM																	
TREASURY - ALL	6.1	0.13	-0.56	-1.36	-1.91	2.31	0.63	0.84	2.51	-0.05	0.27	1.73	2.56	1.98	0.19	2.81	2.75
SHORT	2.0	0.14	0.12	-0.27	-0.15	0.87	1.25	0.67	2.27	-0.05	0.19	1.39	2.32	1.69	0.24	2.38	2.83
SHORT-INT	3.8	0.25	0.02	-0.87	-0.85	1.75	1.84	1.57	2.68	-0.05	0.26	1.91	2.74	2.17	0.19	2.72	3.23
INTRMD	5.3	0.18	-0.26	-1.13	-1.39	2.59	1.78	1.25	3.06	-0.03	0.25	2.47	3.09	2.66	0.13	3.09	2.58
LONG-INT	6.8	-0.06	-0.83	-1.56	-2.38	3.51	2.20	1.09	3.39	0.02	0.36	2.73	3.39	2.97	0.12	3.44	2.26
LONG	14.5	-1.17	-3.24	-2.05	-5.23	10.47	5.77	-3.26	3.83	0.05	0.28	3.45	3.97	3.66	0.11	1.53	0.34
MUNICIPAL-TERM																	
SHORT	2.0	0.09	0.03	0.21	0.24	1.16	0.39	0.88	1.66	-0.03	-0.05	1.03	1.71	1.29	0.20	1.83	2.42
SHORT-INT	3.3	0.10	-0.13	-0.17	-0.30	2.39	0.12	1.96	1.97	-0.02	0.08	1.30	1.99	1.59	0.17	2.03	2.29
INTRMD	4.8	0.16	-0.27	-0.98	-1.24	4.74	0.28	3.27	2.45	-0.02	0.26	1.84	2.50	2.13	0.17	1.85	1.58
LONG-INT	5.2	0.18	-0.32	-1.25	-1.57	5.42	0.38	3.68	2.59	-0.02	0.31	1.99	2.69	2.27	0.18	1.75	1.42
LONG	6.7	0.21	-0.24	-1.84	-2.07	8.19	0.97	4.52	3.29	-0.03	0.37	2.79	3.59	3.07	0.19	1.16	0.94
MUNICIPAL-QUALITY																	
MUNI-EXEMPT	5.1	0.17	-0.23	-0.95	-1.18	4.95	0.90	3.32	2.58	-0.02	0.21	2.05	2.64	2.32	0.15	1.75	1.26
MUNI-TAXABLE	8.1	-0.40	-1.24	-1.23	-2.45	6.81	4.16	1.30	4.01	0.03	0.23	3.59	4.03	3.79	0.09	2.39	1.28
HIGH-GRADE	5.1	0.17	-0.28	-1.05	-1.33	4.22	-0.09	3.21	2.26	-0.03	0.25	1.54	2.29	1.84	0.19	2.20	2.06
'A' RATED	4.9	0.17	-0.23	-1.04	-1.26	5.40	0.82	3.60	2.59	-0.03	0.22	2.08	2.67	2.34	0.15	1.67	1.33
'BBB' RATED	5.2	0.12	-0.27	-0.94	-1.21	7.97	0.94	4.31	3.15	-0.02	0.23	2.79	3.60	3.11	0.22	0.20	0.43
HIGH YIELD	7.3	0.36	-0.11	-0.94	-1.05	9.69	3.52	1.81	5.29	-0.03	0.14	5.05	6.34	5.62	0.42	-0.77	0.72
MUNICIPAL-SECTOR																	
PRE-RE	2.4	0.09	-0.06	0.17	0.11	1.07	0.32	0.95	1.61	-0.03	-0.05	0.93	1.66	1.18	0.23	1.90	2.71
GO	5.1	0.18	-0.25	-1.12	-1.37	4.56	0.08	2.99	2.44	-0.02	0.23	1.76	2.47	2.06	0.17	2.31	1.96
DED TAX	5.7	0.14	-0.26	-0.99	-1.24	3.73	1.92	1.24	2.75	-0.01	0.25	2.21	3.12	2.62	0.25	0.50	0.38
WTR-SWR	5.2	0.15	-0.29	-1.15	-1.44	5.31	0.53	3.92	2.52	-0.02	0.25	1.97	2.60	2.24	0.15	1.79	1.27
PUB PWR	4.6	0.15	-0.22	-0.92	-1.14	3.20	1.18	4.57	2.44	-0.02	0.21	1.77	2.84	2.27	0.32	0.51	0.38
HEALTHCARE	5.5	0.23	-0.20	-1.29	-1.49	7.00	1.24	4.65	3.20	-0.03	0.36	2.72	3.38	2.96	0.16	1.48	1.16
HIGHER ED	5.7	0.20	-0.27	-1.23	-1.49	6.20	0.62	3.87	2.88	-0.02	0.28	2.38	2.97	2.62	0.15	1.73	1.39
TRANSPORT	5.2	0.16	-0.27	-1.14	-1.40	6.25	0.93	3.76	2.67	-0.02	0.25	2.13	2.80	2.41	0.17	1.49	1.10
HOUSING	9.1	0.19	-0.23	-0.94	-1.16	5.59	1.52	3.71	3.04	-0.02	0.24	2.66	3.24	2.94	0.13	0.73	0.02
TOBACCO	10.9	0.19	-0.22	0.21	-0.01	17.82	6.17	13.48	4.64	0.02	0.04	4.48	5.26	4.84	0.22	-0.90	-1.16
IDB	4.5	0.14	-0.15	-0.50	-0.65	6.41	1.53	3.66	3.16	-0.02	0.21	2.73	3.51	3.08	0.20	0.42	0.58
GLOBAL / CORP																	
GLOBAL	7.1	-0.45	-1.17	1.19	0.00	7.39	1.77	-3.15	1.85	0.00	0.16	1.47	1.86	1.62	0.08	3.09	1.67
US CORP-IG	7.5	-0.54	-1.34	-0.96	-2.28	6.42	5.84	-0.68	3.59	0.04	0.28	3.03	3.59	3.24	0.11	3.12	1.54
US CORP-HY	4.3	-1.47	-1.86	0.60	-1.27	7.50	18.37	-4.47	6.36	0.44	0.65	5.31	6.36	5.65	0.18	3.92	-0.21

Rich Fair Cheap

*Rich/Cheap: +/- 1 Z-scr

MUNI TAX-EXEMPT SPREADS								
2Y STATISTICS								
		2/12/18	Avg	Min	Max	SD	Z-Scr	Value
10Y	AA	20	26	15	40	6	-1.03	Rich
	A	43	55	34	82	9	-1.38	Rich
	BBB	84	99	74	118	8	-1.81	Rich
30Y	AA	44	41	25	65	7	0.37	Fair
	A	75	71	49	99	9	0.49	Fair
	BBB	107	110	85	144	12	-0.30	Fair
	HY	228	310	228	472	54	-1.53	Rich

Muni Primary Market

Gross Supply (\$ in millions)

	As of 2/9/18
Last Week	4,086.8
12wk Moving Avg	8,451.2
YTD	25,744.3

Source: Bloomberg

Weekly Visible Supply (\$ in millions)

	Week of 2/12/18
Total	3,899.7
Comp.	887.9
Neg.	3,011.8

Source: Bloomberg, Ramirez

30-Day Visible Supply

	Current Total	2017 High \$	2017 High Date	2017 Low \$	2017 Low Date
Total	5,472.0	9,508.9	(1/22)	4,175.5	(1/2)
Comp.	1,669.6	3,332.5	(1/17)	903.1	(1/26)
Neg.	3,802.4	7,162.1	(1/19)	2618.6	(1/2)

Source: Bond Buyer

Top Competitive Issuances Coming to Market

Issuer	State	Amount (\$ 000's)
Mounds View ISD #621	MN	153,575
Highland Park ISD	TX	122,180
Las Vegas Vly Wtr Dt	NV	83,885
Saugus	MA	67,845
Morgan Co SD BOE	UT	49,000

Source: Bloomberg

Top Negotiated Issuances Coming to Market

Issuer	State	Amount (\$ 000's)
Commonwealth Fin Auth	PA	1,390,240
Wayne St Univ BOG	MI	120,325
KY Cmwth	KY	108,670
Palm Beach Co Sch Brd	FL	104,475
Tallahassee City	FL	103,500

Source: Bloomberg

Underwriters will attempt to market \$3.9 bil. of municipals in the week of 2/12, led in the negotiated space by \$1.39 bil Commonwealth Fin Auth, \$120 mil. Wayne St Univ BOG, and \$109 mil. KY Cmwth. The competitive calendar is highlighted by \$154 mil. Mounds View ISD #621, \$122 mil. Highland Park ISD, and \$84 mil. Las Vegas Vly Wtr Dt.

Ramirez Negotiated Issuances Coming to Market

Issuer	State	Amount (\$ 000's)	Senior Manager	Ramirez Role
Georgia Municipal Assoc COP	GA	46,320	Ramirez	Senior Manager
Tallahassee City	FL	103,500	Morgan Stanley	Co-Manager

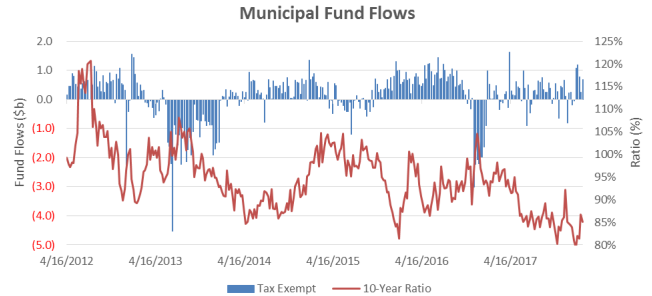
Economic Calendar

Monday (2/12)	Tuesday (2/13)	Wednesday (2/14)	Thursday (2/15)	Friday (2/16)
Monthly Budget Statement	NFIB Small Business Optimism	MBA Mortgage Applications	Empire Manufacturing	Import Price Index
\$48 Bln 3-Month Bill Auction	Fed Speaker: Mester	CPI	Jobless Claims	Housing Starts
\$42 Bln 6-Month Bill Auction	4-Week Bill Auction	Retail Sales	PPI Final Demand	Building Permits
			Philadelphia Fed Business Outlook	U. of Mich. Sentiment
			Industrial Production	
			Capacity Utilization	
			Bloomberg Consumer Comfort	
			TIC Flows	
			\$7 Bln 30-Year TIPS Auction	

Source: Bloomberg

Muni Market Demand

Tax-exempt mutual funds recorded inflows for the fifth consecutive week for the week ending February 7, with inflows totaling \$675 million. This was 96% above the 12-week moving average of \$344 million.



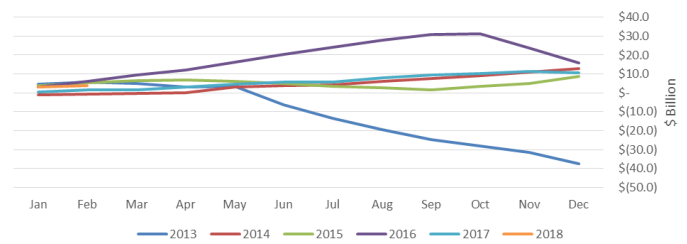
Source: Lipper Fund Flows

US Lipper Fund Flows

Sector	Flow Change (\$B)	YTD (\$B)
Tax-Exempt	Inflow: 0.675	Inflow: 3.888
Money Market	Inflow: 30.815	Outflow: -18.554
Taxable	Inflow: 3.112	Inflow: 28.276
Equities	Outflow: -23.895	Inflow: 28.401

Source: Lipper Fund Flows

Cumulative Fund Flows

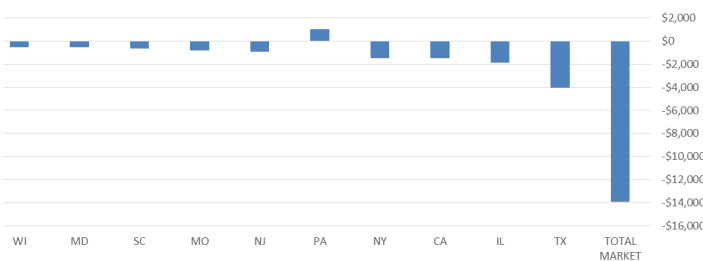


Source: Bloomberg

Muni Market Supply

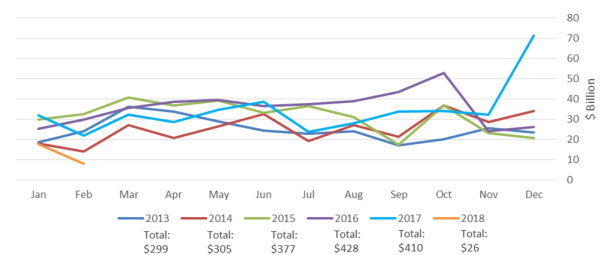
Over the next 30 days we see net muni market supply at -\$13.93 bil., comprised of \$5.70 bil. new issues, \$14.14 bil. maturing, and \$5.49 bil. announced calls. The states that stand to experience the largest change in outstanding debt include Texas (-\$4.05 bil.), Illinois (-\$1.88 bil.), California (-\$1.46 bil.), New York (-\$1.46 bil.), and Pennsylvania (+\$1.05 bil.).

Largest Net Flows - Next 30 Days



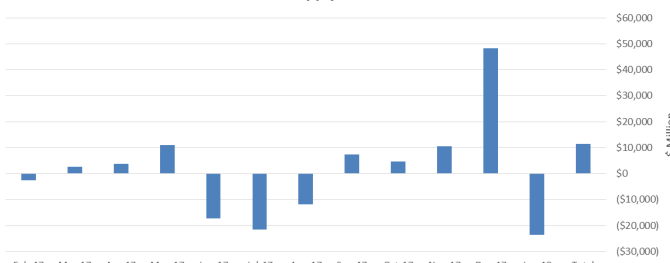
Source: Bloomberg

Monthly Gross Supply



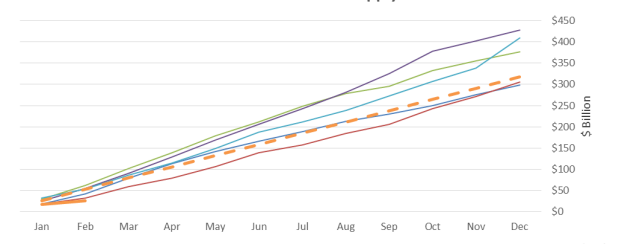
Source: Bloomberg, Ramirez

Net Supply - 12 Months



Source: Bloomberg

Cumulative Gross Supply



Source: Bloomberg, Ramirez

Ramirez Managed Deals

\$46,320,000
Georgia Municipal Association, Inc.
Certificates of Participation
(City of Atlanta Public Safety Projects)
Series 2018

Issue: Rated Aa2/AA. Pricing Tuesday, February 13, 2018. Ramirez & Co. is **Senior Manager** of this transaction. Proceeds of the Series 2018 Certificates of Participation (COPs) will be used to acquire various public safety projects in the City of Atlanta (City), including equipment for the City's Emergency E-911 Communications Center and improvements/renovations at a police precinct, detention center, fire station, public safety annex parking lot, and municipal court facility.

Security: The COPs are secured by a first lien on the leased assets and represent a proportionate undivided ownership interest in installment payments and certain other payments to be made by the City to the Georgia Municipal Association, Inc. (GMA), pursuant to an Installment Sale Agreement (Agreement). Under the Agreement, the City will annually request an appropriation for the amount necessary to pay the installment and certain other payments. Such appropriations are derived from the City's general fund and any other legally available sources. The Agreement provides that if the City fails to pay its installment payments, it must quit and vacate the project facilities, at which point the obligation to make installment payments would terminate. The Agreement stipulates that the City must carry insurance policies covering the project facilities.

Credit Overview: GMA was created for the purpose of promoting and assisting municipalities. Its purposes include the acquisition and construction of buildings/facilities/equipment for use by municipalities and the State. The City spans about 136.5 square-miles across Fulton and DeKalb counties in the northern portion of the State of Georgia (State). It is the state capital and the most populous city in the State, with an estimated 2016 population of 472,522. The City's population has exhibited a five-year compound annual growth rate (CAGR) of 1.3%. Further, the Atlanta metropolitan area has an estimated population of about 5.8 million, representing approximately 56% of the entire State's population. It is the 9th largest metropolitan area in the nation. The City serves as an economic hub of the southeastern United States and is home to the world's busiest airport (Hartsfield-Jackson) and the headquarters of 13 Fortune 500 companies. Resident incomes for the metropolitan area are below average, with a median per capita income at 96% of the national median. As of November 2017, the City's unemployment rate was 4.7%, above the national rate of 3.9%. In FY17 the City reported a general fund deficit of \$24.3 million on general fund revenues of \$572.9 million. The City's general fund balance at FYE17 was \$200.1 million, or 34.9% of general fund revenues. The City's assessed value (AV) totals \$25.56 billion, with a five-year CAGR of 3.6%. The ten largest taxpayers account for 10.1% of total AV, with the largest taxpayer – Development Authority of Fulton County – accounting for 4.7%. Overall net debt totals \$1.34 billion (\$2,842 per capita), or 5.3% of total AV. The City's three pension plans are funded at 60.4%, 71.9%, and 73.1%. The City's net other post-employment benefits (OPEB) obligation totals \$477.2 million.

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