

Municipal Market Weekly

Ramirez Municipal Strategy



September 11, 2018

Page 1

Fixed income and equities were down on the week as various cross-currents created mixed investor sentiment. Munis traded down mostly in sympathy with Treasuries, which ultimately declined after Friday's unexpectedly strong August labor report, which showed 201K jobs added and wages growing 0.4% MoM and 2.9% YoY. Munis were also affected by secondary market oversupply, reduced dealer liquidity, fund outflows, and lower relative value vs Treasuries. Treasuries were mixed prior to the Friday jobs report with Tuesday's ISM Manufacturing report that indicated a 14-yr high index and offset by escalated trade rhetoric related to China and Canada. The S&P Main Muni Index lost -28 bps on the week (YTD gains 17 bps) vs Treasuries that lost -48 bps on the week (YTD returns -116 bps). The overall positive US economic news (labor and manuf.), normally a risk-on catalyst, was just the opposite for stocks as a surging US dollar and EM contagion fears depressed share prices; the S&P 500 equity index lost -103 bps on the week (+767 bps YTD). The primary Muni calendar last week was, as expected, light at \$4.0 bil., and was generally received favorably. Fund flows were negative on the week at -\$181 mil. and now stand at \$8.6 bil. on the year. Dealer liquidity continues to remain somewhat constrained due to above-average inventory (+49%) driven by elevated inventory of short-dated bonds, which has had an outsized impact on the front-end of the MMD curve. MMD 2s30s was 2 bps flatter at 130 bps after scale cuts averaged 7.1 bps, including 10 bps in the 2yr spot, 6 bps in the 5yr spot, and 8 bps in the 30yr spot. In contrast, Treasury yields increased by roughly 8 bps across the curve, maintaining 2s30s at 39 bps.

Munis largely underperformed Treasuries on the week by an average of 0.48 ratios, driven by the front-end sell-off, with the notable exception being the 10yr spot that outperformed by 0.5 ratio. Muni underperformance continues to create better relative value in 5, 10, and 30yrs, however, all MMD spots continue to read slightly expensive vs 3yr averages, notably the 2yr spot at 66.6%. We suspect Munis need to get slightly cheaper from current levels, which will likely occur as new supply hits the market through year-end and as Treasuries weaken on strong US economic data and Fed rate hikes. The 30yr space does appear cheap on a 1yr basis at over 100.2%, although we suspect it will still take another 1-2 ratios of cheapening to materially entice "cross-over" investors to support long duration given the still very flat MMD 2s30s at only 130 bps. As rates, and possibly spreads, are likely to march higher through year-end and into 2019, we think it makes sense to continue improving Muni portfolio credit quality into 'AA' or better general market names and selectively add credit risk in 'A' rated Hospitals, Higher Ed, and Pub Power (Pg 3). We like shorter-call structures (5-8yr calls) inside 15 yrs maturities, which captures 90% of the MMD yield curve, has optimal roll return (~50 bps), and are generally cheaper vs shorter and more expensive 2-4 yr call structures. We also like paring back Muni High Yield exposure to capture some gains as we think bonds in this sector are vastly overbought at a spread of approx. 165 bps (spread has averaged 281 bps since Jan. 2016). To the extent that high yield experiences outflows, even a small amount of selling could adversely affect the sector given the high concentration of risk in tobacco bonds, which has driven sector returns.

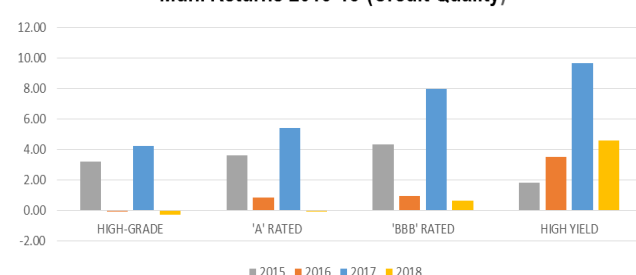
Muni supply this week ramps up to \$7.3 bil., led by a mosaic of different names in both the competitive and negotiated markets which should be priced to sell. The negotiated space is led by \$500 mil. Las Vegas Convention Ctr, \$375 mil. Poudre School Dist, CO, and \$357 mil. Indy Water. Competitives are led by \$206 mil. Shoreline School Dist, WA. Total gross supply YTD is \$218.9 bil., or -12% YoY, which is surprising to the upside at this time compared to our call for total 2018 supply at -27% YoY (\$317 bil.). For now, we are maintaining our full-year 2018 supply projection at \$317 bil. as we think issuance, likely new-money, will likely decelerate in as rates ultimately move higher given the two widely anticipated (additional) Fed rate increases of 25 bps in 2018. Net muni market supply over the next 30 days is estimated at -\$9.85 bil., comprised of +\$11.93 bil. new issues against -\$21.78 bil. maturing (\$13.43 bil.), and announced calls (\$8.35 bil.). The states that stand to experience the largest change in outstanding debt include New York (-\$2.57 bil.), Massachusetts (-\$1.29 bil.), Florida (-\$1.12 bil.), California (-\$1.12 bil.), and Georgia (-\$1.02 bil.).

The data focus this week will be on US inflation and retail sales for Aug, including PPI on Wed, CPI on Thurs, and retail sales on Fri. The Treasury is selling about \$73 bil. of 3/10/30yr bonds. However, all eyes will be on the impending Hurricane about to hit the Carolinas, US trade rhetoric, EM contagion risks, and, of course, Trump vs. the World.

High Yield Munis to AAA MMD



Muni Returns 2015-18 (Credit Quality)



Peter L. Block
 Managing Director | Credit Strategy
 (212) 248-3885
 peter.block@ramirezco.com

Cem Baloglu
 AVP | Credit Strategy
 (212) 248-3876
 cem.baloglu@ramirezco.com

John Young
 Managing Director | Underwriting
 (212) 248-3870
 john.young@ramirezco.com

Alan Greco
 Managing Director | Sales & Trading
 (212) 248-3892
 alan.greco@ramirezco.com

2018 Strategy

- Ladder or 70/30 Barbell strategy (depending on mandate)
- Defensive posture; 5yr-7yr eff duration
- Intermediate bonds (14-16yr) with shorter calls (5-8yrs); cheaper vs shorter calls, capture ~90% of curve, fast reinvestment, optimal rolldown
- Best rolldown is generally 8-15yrs.
- Coupon: 5%+ (lower convexity vs 4%)
- Credit: 'AA' GOs, 'A' rated or better (select names)

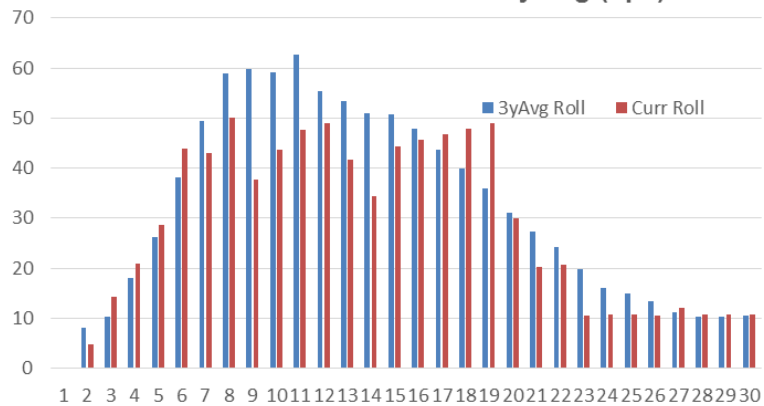
Scenarios (1Y)					
Scenario	Bear	Base		Bull	
Strategy	Ladder	Barbell	Ladder	Barbell	Ladder
Crv Shift (avg bps)*	50	25	25	5	5
Quality	AA GO / A Rev	AA GO / A Rev		AA GO / A Rev	
TR % Proj.	1.60%	3.22%	1.84%	4.04%	4.15%
OAS (bps)*	1	25	11	33	35
Eff Dur (yrs)	0.9	6.9	3.5	8.6	10.4
WAM	1.4	14.1	4.5	19.6	24.0
Cnvx	0.02	-0.66	0.28	-1.23	-1.29

*W.A. bps shift = implied by FWD rates =

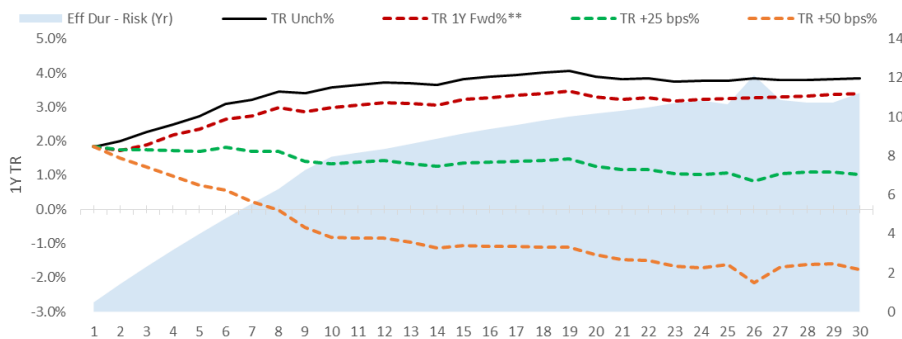
5

*OAS Vol = 20

bps MMD Roll Returns - Current v 3y Avg (bps)



MMD Callable Curve (5% Cpn) - 12M FWD Total Return Projections*

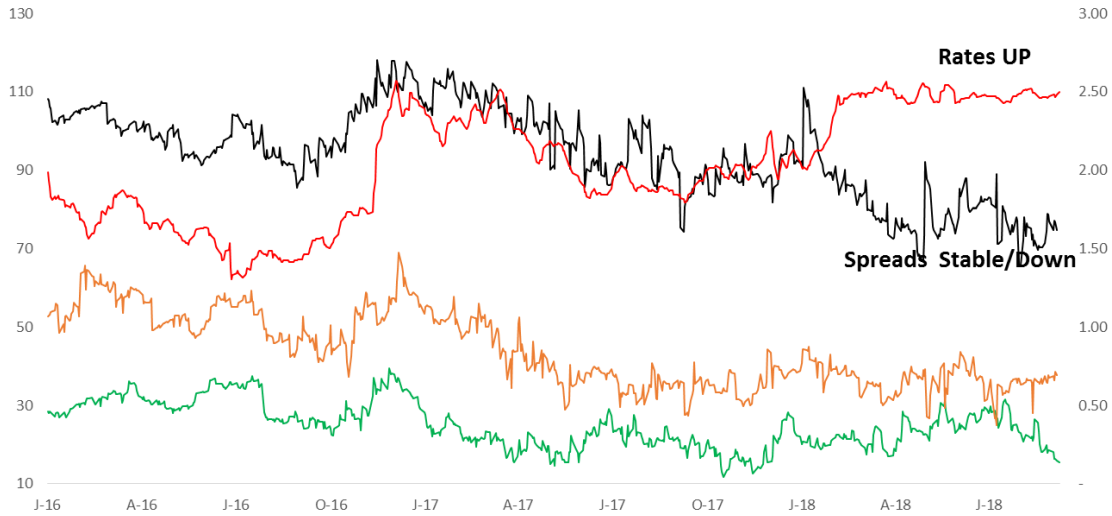


Source: MMD, Bloomberg, Ramirez & Co.

*OAS; **MMD / UST Implied

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	8.2	2.9	6.6	8.7	9.8	10.6	11.1
Scenarios	Unch	3.70%	2.43%	3.37%	3.71%	3.96%	3.79%	3.82%
	1Y Fwd Rates	3.16%	2.11%	2.86%	3.11%	3.35%	3.23%	3.34%
	Parallel +25 bps	1.27%	1.73%	1.56%	1.35%	1.40%	1.09%	1.02%
	Parallel +50 bps	-1.14%	1.03%	-0.21%	-0.97%	-1.15%	-1.59%	-1.77%

As Muni rates have risen...credit spreads have stabilized or declined



Source: Bloomberg

— AA 10Y — A 10Y — BBB 10Y — AAA 10Y Muni

SECTOR CREDIT SPREADS (10Y)									
2Y STATISTICS									
Sector	Rating	9/7/18	Avg	Min	Max	SD	2y Z-Scr	Value	Sharpe
GO	AA	16	25	12	40	6	-1.64	Rich	-0.6
	A	40	53	25	86	13	-1.04	Rich	1.6
HOSP	AA	28	37	24	60	7	-1.48	Rich	1.3
	A	61	64	48	102	7	-0.47	Fair	5.9
HI ED	AA	12	24	9	40	7	-1.70	Rich	-1.0
	A	37	52	33	94	10	-1.42	Rich	1.8
TRANS	AA	20	25	11	47	8	-0.69	Fair	0.1
	A	37	45	23	87	10	-0.80	Fair	1.7
POWER	AA	13	17	5	32	6	-0.71	Fair	-1.1
	A	45	46	32	72	8	-0.22	Fair	3.4
WTR / SWR	AA	19	23	10	41	5	-0.66	Fair	0.0
	A	42	58	27	104	16	-0.98	Fair	1.4
HY	<BBB-	171	286	168	403	67	-1.72	Rich	2.3

Source: Bloomberg

Municipal Market Weekly

Ramirez Municipal Strategy



September 11, 2018

Page 4

Market Performance

WEEK ENDING: 9/7/18																			
INDEX	Eff Dur	TOTAL RETURN (%)									YIELD (%)							Z-score	
		WTD	Sept '18	3Q18	2Q18	1Q18	2018	2017	2016	2015	9/7/18	WTD Δ	YTD Δ	Lo 12M	Hi 12M	Mean 12M	Vol 12M	12M	3Y
TREASURY-TERM																			
TREASURY - ALL	6.12	-0.48	-0.42	-0.08	0.10	-1.18	-1.16	2.31	0.63	0.84	2.84	0.09	0.60	1.78	2.88	2.48	0.32	1.14	1.88
SHORT	1.97	-0.09	-0.08	0.33	0.28	-0.20	0.41	0.87	1.25	0.67	2.86	0.08	0.79	1.51	2.86	2.35	0.41	1.24	2.10
SHORT-INT	3.77	-0.26	-0.25	0.31	0.04	-0.86	-0.51	1.75	1.84	1.57	3.12	0.08	0.69	1.94	3.17	2.71	0.37	1.09	2.04
INTRMD	5.33	-0.35	-0.32	0.39	0.02	-1.21	-0.81	2.59	1.78	1.25	3.35	0.06	0.54	2.52	3.45	3.05	0.28	1.06	1.85
LONG-INT	6.87	-0.48	-0.41	0.25	0.00	-1.80	-1.56	3.51	2.20	1.09	3.58	0.08	0.56	2.79	3.68	3.29	0.27	1.08	1.75
LONG	15.01	-1.19	-0.88	0.20	-1.43	-3.57	-4.76	10.47	5.77	-3.26	4.01	0.09	0.45	3.45	4.04	3.79	0.18	1.25	1.08
MUNICIPAL-TERM																			
SHORT	1.98	-0.13	-0.11	0.20	0.58	0.24	1.02	1.16	0.39	0.88	1.94	0.10	0.23	1.04	2.04	1.66	0.26	1.06	1.91
SHORT-INT	3.27	-0.19	-0.17	0.25	0.73	-0.33	0.65	2.39	0.12	1.96	2.19	0.10	0.30	1.31	2.28	1.92	0.22	1.07	1.80
INTRMD	4.80	-0.24	-0.21	0.31	0.82	-1.09	0.03	4.74	0.28	3.27	2.59	0.08	0.40	1.85	2.67	2.36	0.22	1.06	1.49
LONG-INT	5.20	-0.25	-0.22	0.34	0.85	-1.35	-0.18	5.42	0.38	3.68	2.71	0.07	0.43	2.00	2.79	2.48	0.22	1.04	1.39
LONG	6.70	-0.35	-0.31	0.12	0.92	-1.56	-0.54	8.19	0.97	4.52	3.39	0.07	0.46	2.79	3.49	3.20	0.18	1.02	1.05
MUNICIPAL-QUALITY																			
MUNI-EXEMPT	5.07	-0.28	-0.25	0.20	0.91	-0.92	0.17	4.95	0.90	3.32	2.75	0.08	0.38	2.07	2.82	2.52	0.20	1.16	1.49
MUNI-TAXABLE	7.95	-0.51	-0.41	0.08	0.06	-0.80	-0.67	6.81	4.16	1.30	4.15	0.06	0.37	3.65	4.20	3.94	0.16	1.30	1.62
HIGH-GRADE	5.07	-0.25	-0.22	0.22	0.70	-1.21	-0.30	4.22	-0.09	3.21	2.43	0.08	0.42	1.55	2.50	2.17	0.24	1.08	1.66
'A' RATED	4.87	-0.28	-0.25	0.15	0.84	-1.07	-0.09	5.40	0.82	3.60	2.78	0.09	0.41	2.09	2.85	2.54	0.20	1.20	1.49
'BBB' RATED	5.20	-0.26	-0.23	0.43	1.14	-0.94	0.61	7.97	0.94	4.31	3.28	0.08	0.36	2.79	3.36	3.10	0.16	1.15	0.78
HIGH YIELD	6.64	-0.29	-0.24	0.91	3.06	0.58	4.61	9.69	3.52	1.81	4.79	0.05	-0.36	4.64	5.45	5.09	0.23	-1.31	1.02
MUNICIPAL-SECTOR																			
PRE-RE	2.41	-0.12	-0.09	0.18	0.56	0.10	0.84	1.07	0.32	0.95	1.87	0.09	0.21	0.93	2.00	1.60	0.26	1.04	1.91
GO	5.11	-0.28	-0.26	0.15	0.79	-1.19	-0.25	4.56	0.08	2.99	2.62	0.08	0.41	1.78	2.69	2.37	0.23	1.09	1.70
DED TAX	5.67	-0.30	-0.26	0.39	1.27	-0.84	0.82	3.73	1.92	1.24	2.89	0.08	0.39	2.23	2.98	2.67	0.20	1.09	0.91
WTR-SWR	5.21	-0.32	-0.29	0.06	0.81	-1.24	-0.38	5.31	0.53	3.92	2.68	0.08	0.41	1.99	2.76	2.45	0.20	1.12	1.39
PUB PWR	4.50	-0.23	-0.20	0.28	0.89	-0.99	0.16	3.20	1.18	4.57	2.54	0.07	0.32	1.78	2.67	2.34	0.22	0.91	0.71
HEALTHCARE	5.49	-0.33	-0.29	0.06	1.03	-0.99	0.10	7.00	1.24	4.65	3.32	0.09	0.48	2.72	3.37	3.09	0.18	1.31	1.26
HIGHER ED	5.63	-0.32	-0.29	0.12	0.86	-1.14	-0.17	6.20	0.62	3.87	3.02	0.08	0.42	2.40	3.09	2.80	0.19	1.16	1.37
TRANSPORT	5.10	-0.29	-0.26	0.20	0.87	-1.28	-0.22	6.25	0.93	3.76	2.85	0.09	0.43	2.14	2.92	2.60	0.22	1.16	1.41
HOUSING	9.52	-0.38	-0.35	0.00	0.75	-0.66	0.09	5.59	1.52	3.71	3.23	0.09	0.43	2.66	3.27	3.01	0.16	1.43	1.29
TOBACCO	7.99	-0.16	-0.10	0.79	4.87	1.72	7.51	17.82	6.17	13.48	3.40	0.05	-1.20	3.18	5.20	4.31	0.58	-1.55	-2.39
IDB	4.86	-0.23	-0.20	0.25	1.04	-0.35	0.94	6.41	1.53	3.66	3.18	0.07	0.23	2.73	3.40	3.07	0.17	0.65	0.55
GLOBAL / CORP / EQUITY																			
S&P 500	N/A	-1.03	-0.79	5.90	2.93	-1.22	7.67	19.42	10.77	-0.73	1.86	0.02	-0.07	1.84	2.07	1.94	0.05	0.17	-1.46
GLOBAL AGG	7.15	-0.43	-0.34	-0.40	-2.78	1.36	-1.85	7.39	1.77	-3.15	2.08	0.04	0.39	1.50	2.08	1.83	0.17	1.43	1.92
US CORP-IG	7.41	-0.49	-0.34	0.99	-0.98	-2.32	-2.32	6.42	5.84	-0.68	4.03	0.08	0.72	3.09	4.07	3.64	0.34	1.15	1.93
US CORP-HY	4.10	-0.13	-0.04	1.79	1.03	-0.86	1.96	7.50	18.37	-4.47	6.33	0.06	0.61	5.31	6.54	6.00	0.35	0.91	-0.23

Rates & Ratios

	This Wk	Last Wk	End Qtr	End Yr	Mean		Value		WTD		MTD		QTD		YTD	
	9/7/18	8/31/18	6/29/18	12/29/17	12M	3Y	12M	3Y	Perf		Perf		Perf		Perf	
AAA MMD / UST									Ratios		Ratios		Ratios		Ratios	
2 Yr	67%	65%	65%	82%	70%	79%	Fair	Rich	1.9	Under	1.9	Under	1.3	Under	-15.6	Out
5 Yr	74%	74%	73%	76%	73%	77%	Fair	Fair	0.1	Under	0.1	Under	0.5	Under	-1.7	Out
10 Yr	85%	85%	87%	81%	85%	90%	Fair	Fair	-0.5	Out	-0.5	Out	-2.1	Out	3.4	Under
30 Yr	100%	100%	99%	92%	97%	98%	Cheap	Fair	0.4	Under	0.4	Under	1.3	Under	8.7	Under
UST									BPS		BPS		BPS		BPS	
2 Yr	2.70	2.63	2.51	1.90	2.16	1.38	Cheap	Cheap	7.4		7.4		19.1		80.4	
5 Yr	2.82	2.74	2.71	2.22	2.48	1.86	Fair	Cheap	7.8		7.8		10.5		59.3	
10 Yr	2.94	2.86	2.83	2.43	2.70	2.27	Fair	Cheap	7.5		7.5		10.4		50.4	
30 Yr	3.09	3.02	2.97	2.78	2.98	2.84	Fair	Fair	6.9		6.9		12.2		31.8	
AAA MMD									BPS		BPS		BPS		BPS	
2 Yr	1.80	1.70	1.64	1.56	1.51	1.04	Cheap	Cheap	10.0		10.0		16.0		24.0	
5 Yr	2.08	2.02	1.99	1.68	1.82	1.42	Fair	Cheap	6.0		6.0		9.0		40.0	
10 Yr	2.49	2.44	2.46	1.98	2.28	2.02	Fair	Cheap	5.0		5.0		3.0		51.0	
30 Yr	3.10	3.02	2.94	2.54	2.89	2.79	Cheap	Cheap	8.0		8.0		16.0		56.0	

Muni Primary Market

Gross Supply (\$ in millions)

	As of 9/7/18
Last Week	4,007.5
12wk Moving Avg.	6,309.7
YTD	218,936.0

Source: Bloomberg

Weekly Visible Supply (\$ in millions)

	Week of 9/10/18
Total	7,306.7
Comp.	2,040.7
Neg.	5,265.9

Source: Bloomberg, Ramirez

30-Day Visible Supply (\$ in millions)

	Current Total	2018 High		2018 Low	
		\$	Date	\$	Date
Total	10,903.4	16,653.6	(8/13)	2,017.8	(6/28)
Comp.	3,361.1	6,795.3	(5/14)	903.1	(1/26)
Neg.	7,542.3	14,292.2	(8/9)	635.2	(6/28)

Source: Bond Buyer

Top Competitive Issuances Coming to Market

Issuer	State	Amount (\$ 000's)
Shoreline SD #412	WA	206,810
St. Petersburg Pub Util	FL	204,605
Santa Clara Co Fin Auth	CA	163,300
Mecklenburg Co	NC	150,000
Pompano Beach	FL	102,420

Source: Bloomberg

Top Negotiated Issuances Coming to Market

Issuer	State	Amount (\$ 000's)
Las Vegas Convention	NV	500,000
Poudre SD R-1	CO	375,000
Indianapolis - Wtr Sys	IN	357,995
Sarasota Co Pub Hosp Dist Obligated Group	FL	350,000
Chicago Hsg Auth	IL	325,000

Source: Bloomberg

Underwriters will attempt to market \$7.3 bil. of munis in the week of 9/10, led in the negotiated space by \$500 mil. Las Vegas Convention Center, \$375 mil. Poudre SD R-1, and \$358 mil. Indianapolis Water. The competitive calendar is highlighted by \$207 mil. Shoreline SD #412 and \$205 mil. St. Petersburg Pub Util.

Ramirez Negotiated Issuances Coming to Market

Issuer	State	Amount (\$ 000's)	Senior Manager	Ramirez Role
Imperial Co Local Trans Auth	CA	16,835	SAR	Senior
City of Waukegan	IL	7,850	SAR	Senior
Indianapolis - Wtr Sys	IN	357,995	JPM	Co-Manager
Massachusetts HFA SFM	MA	34,150	RBC	Co-Manager

Economic Calendar

Monday (9/10)	Tuesday (9/11)	Wednesday (9/12)	Thursday (9/13)	Friday (9/14)
Fed Speaker - Bostic	NFIB Small Business Optimism	MBA Mortgage Applications	CPI MoM	Retail Sales Advance MoM
U.S. to Sell USD48 Bln 3-Month Bills	Wholesale Inventories MoM	PPI Final Demand MoM	CPI Ex Food and Energy MoM	Retail Sales Ex Auto MoM
U.S. to Sell USD 42 Bln 6-Month Bills	U.S. to Sell USD26 Bln 52-Week Bills	PPI Ex Food and Energy MoM	CPI YoY	Retail Sales Ex Auto and Gas
	U.S. to Sell USD45 Bln 4-Week Bills	PPI Final Demand YoY	Initial Jobless Claims	Import Price Index MoM
	U.S. to Sell USD35 Bln 3-Year Notes	PPI Ex Food and Energy YoY	Continuing Claims	Industrial Production MoM
		Fed Speakers - Bullard / Brainard	Monthly Budget Statement	Capacity Utilization
		Fed Reserve Releases Biege Book	Fed Speakers - Quarles / Bostic	U. of Mich. Sentiment
		U.S. to Sell USD23 Bln 10-Year Notes	U.S. to Sell USD15 Bln 30-Year Bonds	Fed Speakers - Evans / Rosen-gran

Source: Bloomberg

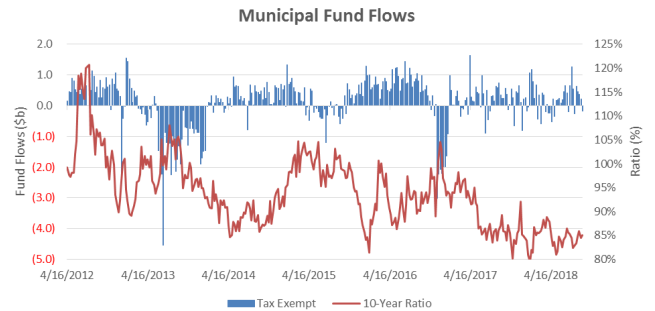
Muni Market Demand

Tax-exempt mutual funds reported outflows for the week ending September 5th, with an outflow of \$181 million. This compares to the 12-week moving average of a \$381 million inflow.

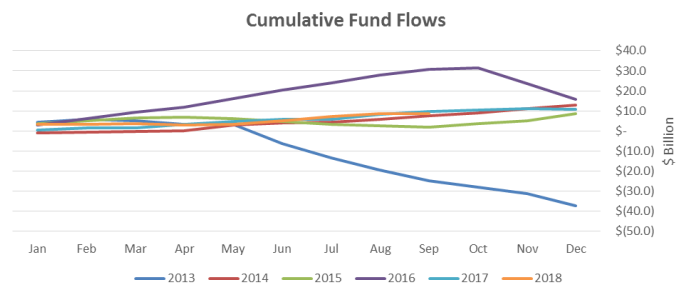
US Lipper Fund Flows

Sector	Flow Change (\$B)	YTD (\$B)
Tax-Exempt	Outflow: -0.181	Inflow: 8.556
Money Market	Inflow: 11.836	Outflow: -6.176
Taxable	Outflow: -1.112	Inflow: 61.111
Equities	Outflow: -7.218	Outflow: -3.604

Source: Lipper Fund Flows



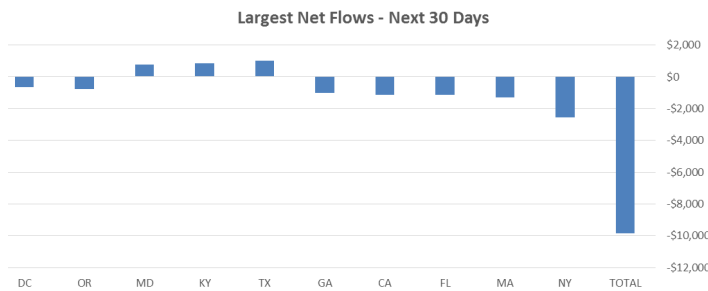
Source: Lipper Fund Flows



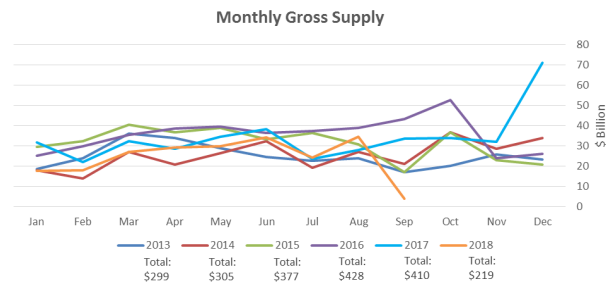
Source: Bloomberg

Muni Market Supply

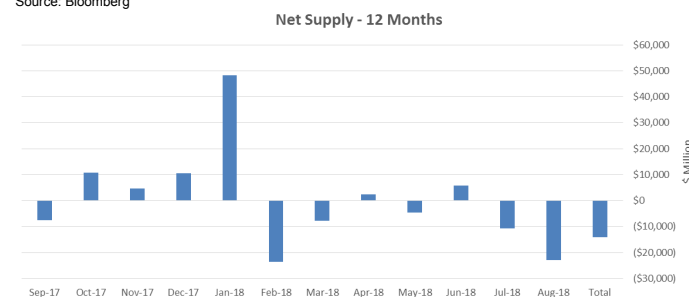
Over the next 30 days, we see net muni market supply at $-\$9.85$ bil., comprised of $\$11.93$ bil. new issues, $\$13.43$ bil. maturing, and $\$8.35$ bil. announced calls. The states that stand to experience the largest change in outstanding debt include New York ($-\$2.57$ bil.), Massachusetts ($-\$1.29$ bil.), Florida ($-\$1.12$ bil.), California ($-\$1.12$ bil.), and Georgia ($-\$1.02$ bil.).



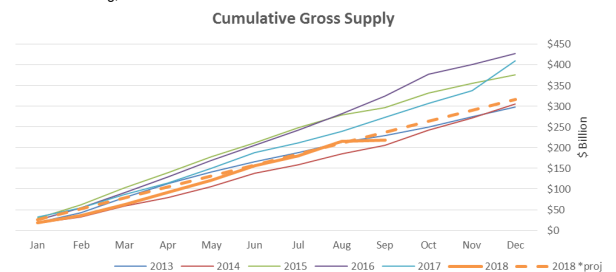
Source: Bloomberg



Source: Bloomberg, Ramirez



Source: Bloomberg



Source: Bloomberg, Ramirez

Samuel A. Ramirez & Co., Inc.

61 Broadway, 29th Floor
New York, NY 10006

©2018 Samuel A. Ramirez & Co., Inc., member FINRA, MSRB, SIPC.

This material is proprietary to Samuel A. Ramirez & Co., Inc. or ("Ramirez") and may not be disclosed to any third party or used for any other purpose without the prior written consent of Ramirez.

Unless otherwise agreed in writing between you and Ramirez & Co, we are acting solely as a principal/underwriter in an arm's length commercial transaction in which Ramirez has financial and other interests that differ from yours. Ramirez is not acting as a municipal advisor, financial advisor or fiduciary and the information provided should not be construed as "advice" within the meaning of Section 15B of the Securities Exchange Act of 1934.

The information in this document should not be considered research¹ or its content be construed as a solicitation or recommendation. This material has been prepared for informational purposes only without regard to any particular user's investment objectives, financial situation, or means, and Ramirez is not soliciting any action based upon it. The Information contained is not an offer to buy or sell or a solicitation of an offer to buy or sell any security or instrument or to participate in any trading strategy. Ramirez does not provide accounting, tax or legal advice; however, you should be aware that any proposed indicative transaction could have accounting, tax, legal or other implications that should be discussed with your advisors and or counsel. The Information should not be relied upon for the maintenance of your books and records or for any tax, accounting, legal or other purposes. Subject to applicable law, you may disclose any aspects of any potential transaction or structure described herein that are necessary to support U.S. federal income tax benefits. The information in this document reflects prevailing conditions and our views as of this date which, are subject to change. In preparing this material, we have relied upon and assumed, without independent verification, the accuracy and completeness of all the information available from internal and public sources or which was provided to us by or on behalf of Ramirez or which was otherwise reviewed by Ramirez. Even when this material contains a kind of appraisal, it should be considered preliminary, suitable only for the purpose described herein and not be disclosed or otherwise used without the prior written consent of Ramirez. Bonds are subject to interest rate risk. When interest rates rise, bond prices fall; generally the longer a bond's maturity, the more sensitive it is to this risk. Bonds may also be subject to call risk, which is the risk that the issuer will redeem the debt at its option, fully or partially, before the scheduled maturity date. The market value of debt instruments may fluctuate, and proceeds from sales prior to maturity may be more or less than the amount originally invested or the maturity value due to changes in market conditions or changes in the credit quality of the issuer. Bonds are subject to the credit risk of the issuer. This is the risk that the issuer might be unable to make interest and/or principal payments on a timely basis. Bonds are also subject to reinvestment risk, which is the risk that principal and/or interest payments from a given investment may be reinvested at a lower interest rate.

¹ For purposes of the debt Rule FINRA 2242, a "debt security" excludes any equity security, municipal security and security-based swap (each as defined under the Exchange Act) and any US Treasury (as defined in FINRA Rule 6710 (p)).